```
ŞEQUENCE LISTING
 <110> De Canck, Ilse
       Rombout, Annelles
                          DEC 0 3 2001
       Rossau, Rudi
 <120> METHOD FOR THE ANDLIFICATION OF HLA CLASS I ALLELES
 <130> IGJ-002
 <140> PCT/EP00/02998
 <141> 2000-04-05
 <150> EP 99870068.6
 <151> 1999-04-09
 <150> US 60/138,614
 <151> 1999-06-11
 <160> 446
 <170> PatentIn Ver. 2.1
 <210> 1
 <211> 20
 <212> DNA
 <213> Homo sapiens
<400> 1
atctcggacc cggagactgt
                                                                      20
<210> 2
<211> 21
<212> DNA
<213> Homo sapiens
<400> 2
gateteggae eeggagaetg t
                                                                      21
<210> 3
<211> 22
<212> DNA
<213> Homo sapiens
<400> 3
ggatctcgga cccggagact gt
                                                                     22
<210> 4
<211> 23
<212> DNA
<213> Homo sapiens
<400> 4
yggatctcgg acccggagac tgt
                                                                     23
<210> 5
<211> 24
```

Attorney Docket No.: IG.	[-	D
--------------------------	-----------	---

<212> DNA <213> Homo sapiens	
<400> 5 gyggateteg gaeeeggaga etgt	24
<210> 6 <211> 25 <212> DNA	
<213> Homo sapiens	
<400> 6 ggyggatete ggaeceggag actgt	25
<210> 7 <211> 20	
<212> DNA <213> Homo sapiens	
<400> 7 ggtctcggrg tcccgcggct	20
<210> 8 <211> 21 <212> DNA	
<213> Homo sapiens <400> 8 gggtctcggr gtcccgcggc t	21
<210> 9 <211> 22 <212> DNA	
<213> Homo sapiens	
<400> 9 agggtetegg rgteeegegg et	22
<210> 10 <211> 23 <212> DNA <213> Homo sapiens	
<400> 10 aagggtctcg grgtcccgcg gct	23
<210> 11 <211> 24 <212> DNA <213> Homo sapiens	
<400> 11 caagggtctc ggrgtcccgc ggct	24

<210><211><211><212><213>	20 DNA	sapiens		
<400> ctcccg		aagggteteg		20
<210> <211> <212> <213>	21 DNA	sapiens		
<400> tetece		caagggtctc	g :	21
<210><211><211><212><212><213>	22 DNA	sapiens		
<400> ctctcc		dcaagggtct	cg	22
<210><211><211><212><213>	23 DNA	sapiens		
<400> cctctc		gdcaagggtc	tcg	23
<210><211><211><212><213>	24 DNA	sapiens		
<400> gcctct		ggdcaagggt	ctcg	24
<210><211><211><212><213>	25 DNA	sapiens		
<400> ggcctc		gggdcaaggg	tctcg	25
<210><211><211><212><213>	20 DNA	sapiens		
<400> tctccc		caagggtctc		20

<213> Homo sapiens

<210> 19 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 19 ctctcccggg	dcaagggtct	С	21
<210> 20 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 20 cctctcccgg	gdcaagggtc	tc	22
<210> 21 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 21 gcctctcccg	ggdcaagggt	ctc	23
<210> 22 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 22 ggcctctccc	gggdcaaggg	tctc	24
<210> 23 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 23 gggcctctcc	cgggdcaagg	gtctc	25
<210> 24 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 24 ggtgtcctgt	ccattctcaa		20
<210> 25 <211> 21 <212> DNA			

<400> 25 rggtgtcctg	tccattctca	a	2:
<210> 26 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 26 crggtgtcct	gtccattctc	aa	22
<210> 27 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 27 ccrggtgtcc	tgtccattct	caa	23
<210> 28 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 28 cccrggtgtc	ctgtccattc	tcaa	24
<210> 29 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 29 tcccrggtgt	cctgtccatt	ctcaa	25
<210> 30 <211> 20 <212> DNA <213> Homo	saniens		
<400> 30	tcccgggdca		20
<210> 31 <211> 21 <212> DNA	0001055		
<213> Homo <400> 31 gectgggcct	ctcccgggdc	a	21
<210> 32 <211> 22 <212> DNA			

<213> Homo	sapiens		
<400> 32 cgcctgggcc	tctcccgggd	ca	22
<210> 33 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 33 gcgcctgggc	ctctcccggg	dca	23
<210> 34 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 34 ggcgcctggg	cctctcccgg	gdca _?	24
<210> 35 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 35 aggegeetgg	geeteteeeg	ggdca	25
<210> 36 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 36 aggegeetgg	geeteteeeg		20
<210> 37 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 37 aaggegeetg	ggcctctccc	g	21
<210> 38 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 38 waaggcgcct	gggcctctcc	cg	22

<211> 23 <212> DNA <213> Homo	sapiens		
<400> 39 twaaggegee	tgggcctctc	ccg	23
<210> 40 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 40	ctgggcctct	cccg	24
<210> 41 <211> 25 <212> DNA			
<213> Homo	sapiens		
<400> 41 ggtwaaggcg	cctgggcctc	teceg	25
<210> 42 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 42 ccgggtwaag	gcgcctgggc		20
<210> 43 <211> 21 <212> DNA <213> Homo	<i>s</i> apiens		
<400> 43 accgggtwaa	ggcgcctggg	C	21
<210> 44 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 44 aaccgggtwa	aggegeetgg	gc	22
<210> 45 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 45 aaaccgggtw	aaggegeetg	ggc	23

<400> 52

<210> 46 <211> 24 <212> DNA <213> Home	o sapiens		
<400> 46 gaaaccgggt	waaggcgcct	gggc	24
<210> 47 <211> 25 <212> DNA <213> Home) sapiens		
.<400> 47 tgaaaccggc	g twaaggcgcc	tgggc	25
<210> 48 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 48	accaaccygg		20
<210> 49 <211> 21 <212> DNA <213> Homo	sapiens `		
<400> 49 gyccvgcccc	gaccaaccyg	g	21
<210> 50 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 50 ygyccvgccc	cgaccaaccy	gg	22
<pre><210> 51 <211> 23 <212> DNA <213> Homo</pre>	sapiens		
<400> 51 cygyccvgcc	ccgaccaacc	yaa z	23
<210> 52 <211> 24 <212> DNA <213> Homo	sapiens		

ccygyccvgc cccgaccaac cygg	24
<210> 53 <211> 25 <212> DNA <213> Homo sapiens	
<400> 53 cccygyccvg ccccgaccaa ccygg	25
<210> 54 <211> 20 <212> DNA <213> Homo sapiens	
<400> 54	
eggaegggee rggtsreeca	20
<210> 55 <211> 21 <212> DNA <213> Homo sapiens	
<400> 55 acggacgggc crggtsrccc a	
<210> 56 <211> 22 <212> DNA <213> Homo sapiens	21
<400> 56 cacggacggg ccrggtsrcc ca	22
<210> 57 <211> 23 <212> DNA <213> Homo sapiens	
<400> 57 ccacggacgg gccrggtsrc cca	23
<210> 58 <211> 24 <212> DNA <213> Homo sapiens	
<400> 58 cccacggacg ggccrggtsr ccca	24
<210> 59 <211> 25 <212> DNA <213> Homo sapiens	

<210> 66 <211> 20

<400> 59 ccccacggac gggccrggts rccca	25
<210> 60 <211> 20 <212> DNA <213> Homo sapiens	
<400> 60 ggtccgagat cerecegaa	20
<210> 61 <211> 21 <212> DNA <213> Homo sapiens	
<400> 61 gggtccgaga tccrccccga a	21
<210> 62 <211> 22 <212> DNA <213> Homo sapiens	
<400> 62 cgggtccgag atccrccccg aa	22
<210> 63 <211> 23 <212> DNA <213> Homo sapiens	
<400> 63 ccgggtccga gatccrcccc gaa	23
<210> 64 <211> 24 <212> DNA <213> Homo sapiens	
<400> 64 teegggteeg agateereee egaa	24
<210> 65 <211> 25 <212> DNA <213> Homo sapiens	
<400> 65 ctccgggtcc gagatccrcc ccgaa	25

Attorney Doo	cket No.: IGJ	-11-	
<212> DNA <213> Homo <400> 66	sapiens		
cccgaagcc	gcgggacycc		20
<210> 67 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 67 rccccgaagc	cgcgggacyc	c	21
<210> 68 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 68 crccccgaag	ccgcgggacy	cc	22
<210> 69 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 69 ccrccccgaa	gccgcgggac	усс	23
<210> 70 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 70 tccrccccga	agccgcggga	сусс	24
<210> 71 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 71 atccrcccg	aageegeggg	acycc	25

20

<210> 72 <211> 20 <212> DNA

<400> 72

<213> Homo sapiens

cccgaagecg cgggacyccg

<210> 73 <211> 21 <212> DNA <213> Homo sapiens	
<400> 73 ccccgaagee gegggaeyee g	21
<210> 74 <211> 22 <212> DNA <213> Homo sapiens	
<400> 74 receegaage egegggaeye eg	22
<210> 75 <211> 23 <212> DNA <213> Homo sapiens	
<400> 75 crccccgaag ccgcgggacy ccg	23
<210> 76 <211> 24 <212> DNA <213> Homo sapiens	
<400> 76 ccrccccgaa gccgcgggac yccg	_24
<210> 77 <211> 25 <212> DNA <213> Homo sapiens	
<400> 77 teereceega ageegeggga cyceg	25
<210> 78 <211> 20 <212> DNA <213> Homo sapiens	
<400> 78 gcgctgttgg agtgtcgcaa	20
<210> 79 <211> 21 <212> DNA <213> Homo sapiens	
<400> 79 ggcgctgttg gagtgtcgca a	21

-12-

<213> Homo sapiens

<210> 80 <211> 22 <212> DNA <213> Homo sapiens <400> 80 gggcgctgtt ggagtgtcgc aa 22 <210> 81 <211> 23 <212> DNA <213> Homo sapiens <400> 81 tgggcgctgt tggagtgtcg caa 23 <210> 82 <211> 24 <212> DNA <213> Homo sapiens <400> 82 atgggcgctg ttggagtgtc gcaa 24 <210> 83 <211> 25 <212> DNA <213> Homo sapiens <400> 83 catgggcgct gttggagtgt cgcaa 25 <210> 84 <211> 20 <212> DNA <213> Homo sapiens <400> 84 cgcgggacyc cgagaccctt 20 <210> 85 <211> 21 <212> DNA <213> Homo sapiens <400> 85 ccgcgggacy ccgagaccct t 21 <210> 86 <211> 22 <212> DNA

<400> 86 geegegggae	yccgagaccc	tt	22
<210> 87 <211> 23 <212> DNA <213> Homo <400> 87	sapiens		
agccgcggga	cyccgagacc	ctt	23
<210> 88 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 88 aagecgeggg	acyccgagac	cctt	24
<210> 89 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 89 gaagccgcgg	gacyccgaga	ccctt	25
<210> 90 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 90 gacyccgaga	cccttgdccc		20
<210> 91 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 91 ggacyccgag	acccttgdcc	С	21
<210> 92 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 92 gggacyccga	gaccettgde	cc	22
<210> 93 <211> 23. <212> DNA			

<213> Homo sapiens <400> 93 cgggacyccg agacccttgd ccc	23
<210> 94 <211> 24 <212> DNA <213> Homo sapiens	
<400> 94 gegggacycc gagaccettg dece	24
<210> 95 <211> 25 <212> DNA <213> Homo sapiens	
<400> 95 cgcgggacyc cgagaccett gdccc <210> 96	25
<211> 20 <212> DNA <213> Homo sapiens <400> 96	
gaccettgde eegggagagg <210> 97 <211> 21	20
<212> DNA <213> Homo sapiens <400> 97 agaccettgd ceegggagag g	
<210> 98 <211> 22 <212> DNA	21
<213> Homo sapiens <400> 98 gagacccttg dcccgggaga gg	22
<210> 99 <211> 23 <212> DNA <213> Homo sapiens	
<400> 99 cgagaccctt gdcccgggag agg	23
<210> 100	

<211> 24 <212> DNA <213> Homo	sapiens		
<400> 100 ccgagaccct	tgdcccggga	gagg	24
<210> 101 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 101 yccgagaccc	ttgdcccggg	agagg	25
<210> 102 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 102	aaaatccccc		20
<210> 103 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 103 agtttaggcc	aaaaatcccc	С	21
<210> 104 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 104 cagtttaggc	caaaaatccc	cc	22
<210> 105 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 105 tcagtttagg	ccaaaaatcc	ccc	23
<210> 106 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 106 ttcagtttag	gccaaaaatc	cccc	24

<210> 107 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 107 tttcagttta	ggccaaaaat	cccc	25
<210> 108 <211> 21 <212> DNA <213> Homo <400> 108	sapiens		
acccgcgggg	attttggcct		21
<210> 109 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 109 aacccgcggg	gattttggcc	tc	22
<210> 110 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 110 caacccgcgg	ggattttggc	ctc	23
<210> 111 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 111	gggattttgg	cctc	24
<210> 112 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 112 mccaacccgc	ggggattttg	gcete	25
<210> 113 <211> 26 <212> DNA <213> Homo <400> 113	sapiens		
.400× 110			

gmccaacccg	cggggatttt	ggcctc	26
<210> 114 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 114 cyggggcgsa	ggtcacgact		20
<210> 115 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 115 ccyggggcgs	aggtcacgac	t	21
<210> 116 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 116	saggtcacga	ct	22
<210> 117 <211> 23 <212> DNA <213> Homo <400> 117			
	gsaggtcacg	act	23
<210> 118 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 118 cggccygggg	cgsaggtcac	gact	24
<210> 119 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 119 ccggccyggg	gcgsaggtca	cgact	25
<210> 120 <211> 20 <212> DNA <213> Homo	sanians		

<400> 120 cccggtttca	ttttcagttg		20
<210> 121 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 121 acceggttte	attttcagtt ç	d	21
<210> 122 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 122 tacccggttt	cattttcagt t	tg	22
<210> 123 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 123 ttacccggtt	tcattttcag t	ttg	23
<210> 124 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 124 tttacccggt	ttcattttca ç	gttg	24
<210> 125 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 125 gtttacccgg	tttcattttc a	agttg	25
<210> 126 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 126 gtcgagggtc	-		20
<210> 127 <211> 21			

21

<210> 133 <211> 21 <212> DNA

<400> 133

<213> Homo sapiens

tegecerag teteessgte t

ctcgrccggr gagagcccca gt

Auomey Do	ket 110 103-0	U <u>Z</u> -2	21-	
<210> 134 <211> 22 <212> DNA <213> Homo	sapiens			
<400> 134 gtcgccccra	gteteessgt o	et		22
<210> 135 <211> 23 <212> DNA <213> Homo	sapiens			
<400> 135	agtctccssg t	cct		23
<210> 136 <211> 24 <212> DNA <213> Homo	sapiens			•
<400> 136	ragteteess o	gtet		24
<210> 137 <211> 25 <212> DNA <213> Homo	sapiens			
<400> 137 cgggtcgccc	cragtetees s	sgtct		25
<210> 138 <211> 20 <212> DNA <213> Homo	sapiens			
<400> 138 cgrccggrga	gagececagt			20
<210> 139 <211> 21 <212> DNA <213> Homo	sapiens			
<400> 139 tcgrccggrg	agageeecag t	:		21
<210> 140 <211> 22 <212> DNA <213> Homo	sapiens			
<400> 140	ananagaan a	~ ! -		22

22

-21-

<210> 141 <211> 23 <212> DNA <213> Homo <400> 141 cctcgrccgg	sapiens rgagagcccc	agt 2	3
<210> 142 <211> 24 <212> DNA <213> Homo <400> 142 ccctcgrccg	sapiens grgagagccc	cagt 2	4
<210> 143 <211> 25 <212> DNA <213> Homo <400> 143	sapiens		
<pre><210> 144 <211> 25 <212> DNA <213> Homo</pre>	ggrgagagcc sapiens	ccagt 2	5
<210> 145 <211> 22 <212> DNA	acgccgagga	tggcc 2	5
<213> Homo <400> 145 gggaggagcg <210> 146 <211> 21	aggggaccsc	ag 2	2
<212> DNA <213> Homo <400> 146	sapiens	a	1
<210> 147 <211> 26 <212> DNA <213> Homo	sapiens		

<400> 147 ccgtgcgctg	cagcgtctcc	ttcccg	26
<210> 148 <211> 23 <212> DNA <213> Homo <400> 148			
<210> 149	cccggcgacc	tat	23
<211> 23 <212> DNA <213> Homo <400> 149	sapiens		
ggagatgggg	aaggeteece		23
<210> 150 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 150 agcccgggag	atctayaggc		20
<210> 151 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 151 cagcccggga	gatctayagg	С	21
<210> 152 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 152 ccageceggg	agatctayag	gc	22
<210> 153 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 153 gccagcccgg	gagatctaya	ggc	23
<210> 154 <211> 24 <212> DNA			

<213> Homo	sapiens		
<400> 154 ggccagcccg	ggagatctay	aggc	24
<210> 155 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 155 aggecagece	gggagatcta	yaggc	25
<210> 156 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 156 coefecttgt	gggaggccag		20
<210> 157 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 157 cccctccttg	tgggaggcca	g	21
<210> 158 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 158 tcccctcctt	gtgggaggcc	ag	22
<210> 159 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 159 ctcccctcct	tgtgggaggc	cag	23
<210> 160 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 160	ttgtgggagg	ccag	24
<210> 161			

<211> <212> <213>	DNA	sapiens		
<400> gtctcc		cttgtgggag	gccag	25
<210><211><211><212><212><213>	20 DNA	sapiens		
<400>	162	tcccctcctt		20
<210><211><211><212>	21 DNA	a on i on a		
<400>	163	sapiens ctccctcct	t	21
<210><211><211><212><213>	22 DNA	sapiens		
<400>	164	tetecectee	tt	22
<210><211><211><212><213>	23 DNA	sapiens		
<400>	165	gtctcccctc	ctt	23
<210><211><211><212><213>	24 DNA	sapien <i>s</i>		
<400> tggtcc		tgtctcccct	cctt	24
<210><211><211><212><213>	25 DNA	sapiens		
<400> ttggtc		wtgtctcccc	tcctt	25

<210> 168 <211> 20 <212> DNA			
<213> Homo	sapiens		
<400> 168 ctagtgttgg	tcccaawtgt		20
<210> 169 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 169 tctagtgttg	gtcccaawtg t	:	21
<210> 170 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 170	ggtcccaawt g	gt 2	22
<210> 171 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 171 attctagtgt	tggtcccaaw t	egt 2	23
<210> 172 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 172 tattctagtg	ttggtcccaa w	vtgt 2	24
<210> 173 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 173 atattctagt	gttggtccca a	awtgt 2	25
<210> 174 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 174			

gggygatatt	ctagtgttgg	2	0
<210> 175 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 175 agggygatat	tctagtgttg	g 2	1
<210> 176 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 176 gagggygata	ttctagtgtt	gg 2	2
<210> 177 <211> 23 <212> DNA			
<213> Homo <400> 177			. ~
ggagggygat <210> 178	attctagtgt	tgg 2	:3
<211> 24 <212> DNA <213> Homo	sapiens		
<400> 178 gggagggyga	tattctagtg	ttgg 2	4
<210> 179 <211> 25 <212> DNA			
<213> Homo <400> 179	sapiens		
agggagggyg	atattctagt	gttgg 2	:5
<210> 180 <211> 20 <212> DNA	eapions		
<213> Homo <400> 180 ggagggygat	attctagtgt	2	:0
<210> 181 <211> 21			
<212> DNA <213> Homo	saniens		

<400> 181 gggagggyga	tattctagtg	t	21
<210> 182 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 182 agggagggyg	atattctagt	gt	22
<210> 183 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 183 gagggagggy	gatattctag	tgt	23
<210> 184 <211> 24 <212> DNA <213> Homo	sapiens	•	
<400> 184 agagggaggg	ygatattcta	gtgt	24
<210> 185 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 185 cagagggagg	gygatattct	agtgt	25
<210> 186 <211> 20 <212> DNA <213> Homo	sapien <i>s</i>		
<400> 186 cccaggagga	ktcctctccc		20
<210> 187 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 187 acccaggagg	akteetetee	c	21
<210> 188 <211> 22			

acaggatetg gaaacccagg ag

<212> DNA <213> Homo		
<400> 188 aacccaggad	g gakteetete ee	22
<210> 189 <211> 23 <212> DNA <213> Homo	o sapiens	
<400> 189 aaacccagga	a ggakteetet eee	23
<210> 190 <211> 24 <212> DNA		
<213> Homo <400> 190 gaaacccagg	aggakteete teee	2.4
<210> 191	agganeteete teete	24
<211> 25 <212> DNA <213> Homo	sapiens	
<400> 191 ggaaacccag	gaggakteet eteee	25
<210> 192 <211> 20 <212> DNA <213> Homo	capions	
<400> 192	aacccaggag	20
<210> 193 <211> 21		
<212> DNA <213> Homo	sapiens	
<400> 193 caggatetgg	aaacccagga g	21
<pre><210> 194 <211> 22 <212> DNA <213> Homo</pre>	sapiens	
<400> 194		

22

<210> 195 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 195 tacaggatct	ggaaacccag	gag	23
<210> 196 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 196 gtacaggate	tggaaaccca	ggag	24
<210> 197 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 197 ggtacaggat	ctggaaaccc	aggag	25
<210> 198 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 198 tcagagtcac	tctctggtac		20
<210> 199 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 199 ctcagagtca	ctctctggta	c	21
<210> 200 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 200 cctcagagtc	actctctggt	ac	22
<210> 201 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 201	cactctctgg	tac	23

<210> 202	
<211> 24	
<212> DNA	
<213> Homo sapiens	
<400> 202	
aacctcagag tcactctctg gtac	
	24
<210, 000	
<210> 203 <211> 25	
<212> DNA	
<213> Homo sapiens	
attor nomo sabtens	
<400> 203	
gaacetcaga gtcactetet ggtae	
- Sydae	25
<210> 204	
<211> 20 <212> DNA	
<213> Homo sapiens	
12107 Homo Sapiens	
<400> 204	
ttctgtgctc ycttccccat	
1.1100000	20
<210> 205	
<211> 21	
<212> DNA	
<213> Homo sapiens	
<400> 205	
gttctgtgct cycttcccca t	
	21
<210> 206	
<211> 22	
<212> DNA	
<213> Homo sapiens	
<400> 206	
ggttctgtgc tcycttcccc at	
so s	22
<210> 207	
<211> 23	
<212> DNA	
<213> Homo sapiens	
<400> 207	
gggttctgtg ctcycttccc cat	
sss-roaging decoycetede cat	23
<210> 208	
<211> 24	
<212> DNA	
<213> Homo sapiens	

<400> 208	
tgggttctgt gctcycttcc ccat	
JJJ Tago gotoyettee toat	24
<210> 209	
<211> 25	
<212> DNA	
<213> Homo sapiens	
<400> 209	
ctgggttctg tgctcycttc cccat	
115 Agordycette eccat	25
	23
<210> 210	
<211> 20	
<212> DNA	
<213> Homo sapiens	
<400> 210 .	
ctggwggagt gtcccatkac	
33 31 geodetikae	20
	20
<210> 211	
<211> 211	
<212> DNA	
<213> Homo sapiens	
<400> 211	
gctggwggag tgtcccatka c	
15 July Tytescateka C	21
	Areal make
<210> 212	
<211> 22	
<212> DNA	
<213> Homo sapiens	
<400> 212	
tgctggwgga gtgtcccatk ac	
11 JJ J-5-Oddack ac	22
<210> 213	
<211> 23	
<212> DNA	
<213> Homo sapiens	
<400> 213	
rtgctggwgg agtgtcccat kac	
13 33 Signoscae Rac	23
<210> 214	
<211> 24	
(212) Data	
<212> DNA	
<213> Homo sapiens	
<400> 214	
tttacccggt ttcattttca gttg	
Jy guy	24
	<u>د</u> ع
<210> 215	
211/ 21J	
<211> 25	
<212> DNA	

<213> Homo sapiens	
<400> 215	
gyrtgctggw ggagtgtccc atkac	25
<210> 216	
<211> 20	
<212> DNA	
<213> Homo sapiens	
<400> 216	
gtcccatkac agatrcmmaa	20
<210> 217	
<211> 21	
<212> DNA	
<213> Homo sapiens	
<400> 217	
tgtcccatka cagatromma a	
	21
<210> 218	
<211> 22 <212> DNA	
<213> Homo sapiens	
<400> 218	
gtgtcccatk acagatrcmm aa	22
<210> 219	
<211> 23	
<212> DNA	
<213> Homo sapiens	
<400> 219	
agtgtcccat kacagatrcm maa	0.0
	23
<210> 220	
<211> 24 <212> DNA	
<213> Homo sapiens	
<400> 220	
gagtgtccca tkacagatrc mmaa	
- Indiaa	24
<210> 221	
<211> 25	
<212> DNA <213> Home and the second s	
<213> Homo sapiens	
<400> 221	
ggagtgtccc atkacagatr cmmaa	25
	د ی
<210> 222	

tetegtkgga gsecateece gse

<211> 26 <212> DNA <213> Hom	no sapiens		
<400> 222 cgtttaccc	g gtttcatttt	: cagttg	26
<210> 223 <211> 27 <212> DNA <213> Hom			
<400> 223		tcagttg	27
<210> 224 <211> 28 <212> DNA			
	o sapiens		
<400> 224 cgcgtttac	e eggttteatt	ttcagttg	28
<210> 225 <211> 20 <212> DNA <213> Hom			
<400> 225			20
<210> 226 <211> 21			
<212> DNA <213> Hom	o sapiens		
<400> 226 tegtkggag	s ccatccccgs	C C	21
<210> 227 <211> 22 <212> DNA			
	o sapiens		
<400> 227 ctcgtkgga	g sccatccccg	sc	22
<210> 228 <211> 23 <212> DNA	,		
	o sapiens		
<400> 228	a geograficoe	700	2.2

23

-34-

<210> 229			
<211> 24			
<212> DNA			
<213> Homo	sapiens		
<400> 229		0.700	24
tictcgtkgg	agsccatccc	cgsc	24
<210> 230			
<211> 25			
<212> DNA			
<213> Homo	sapiens		
<400> 230			0.5
cttctcgtkg	gagsccatcc	ccgsc	25
<210> 231			
<211> 20			
<212> DNA			
<213> Homo	sapiens		
<400> 231			0.0
tctcgtkgga	gsccatcccc		20
<210> 232			
<211> 21			
<212> DNA			
<213> Homo	sapiens		
<400> 232			0.1
ttctcgtkgg	agsccatccc	С	21
<210> 233			
<211> 22			
<212> DNA			
<213> Homo	sapiens		
<400> 233			22
cttctcgtkg	gagsccatcc	CC	22
<210> 234			
<211> 23			
<212> DNA			
<213> Homo	sapiens		
.400> 00:			
<400> 234	aanaaanaha	000	23
LOLEGEOGER	ggagsccatc	CCC	23
<210> 235			
<211> 24			
<212> DNA			
<213> Homo	sapiens		
.220. 110/110			
<400> 235			

ytettetegt kggagseeat eece	24
<210> 236 <211> 25 <212> DNA	
<213> Homo sapiens	
<400> 236	
cytcttctcg tkggagscca tcccc	25
<210> 237	
<211> 20	
<212> DNA <213> Homo sapiens	
<400> 237	
gatoccattt tootoytott	
	20
<210> 238	
<211> 21	
<212> DNA <213> Homo sapiens	
<400> 238 tgateceatt tteeteytet t	
	21
<210> 239	
<211> 22	
<212> DNA <213> Homo sapiens	
<400> 239	
ctgateceat ttteeteyte tt	22
<210> 240	
<211> 23	
<212> DNA	
<213> Homo sapiens	
<400> 240	
gctgatecca ttttecteyt ett	23
<210> 241	
<211> 24	
<212> DNA	
<213> Homo sapiens	
<400> 241	
cgctgatccc attttcctcy tctt	24
	Z 4
<210> 242 <211> 25	
<211> 25 <212> DNA	
<213> Homo sapiens	

<400> 242 gcgctgatcc cattttcctc ytctt	25
<210> 243 <211> 20 <212> DNA <213> Homo sapiens	
<400> 243	
gctgatecca ttttecteyt	20
<210> 244 <211> 21 <212> DNA <213> Homo sapiens	
<400> 244	
egetgatece atttteetey t	21
<210> 245 <211> 22 <212> DNA <213> Homo sapiens	21
<400> 245	
gcgctgatcc cattttcctc yt	22
<210> 246 <211> 23 <212> DNA <213> Homo sapiens	22
<400> 246	
agegetgate ceatttteet eyt	23
<210> 247 <211> 24 <212> DNA <213> Homo sapiens	
<400> 247	
tagegetgat eccattttee teyt	24
<210> 248 <211> 25 <212> DNA <213> Homo sapiens	
<400> 248	
ctagegetga teccatttte eteyt	2.5
<210> 249 <211> 20	25

<212> DNA <213> Homo	sapiens		
<400> 249 tccattcaag	ggagggcgac		20
<210> 250 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 250	gggagggcga	C	21
<210> 251 <211> 22 <212> DNA			
<213> Homo <400> 251 totocattoa	agggagggcg	ac	22
<210> 252	~9999~9999°		
<211> 23 <212> DNA <213> Homo	sapiens		
<400> 252 ttctccattc	aagggagggc	gac	23
<210> 253 <211> 24 <212> DNA			
<213> Homo <400> 253			
<210> 254	caagggaggg	cgac	24
<211> 25 <212> DNA <213> Homo	sapiens		
<400> 254 cattetecat	tcaagggagg	gegae	25
<210> 255 <211> 20 <212> DNA			
<213> Homo <400> 255	sapiens		
agattatccc	aggtgcctgc		20

<210> 262 <211> 21 <212> DNA <213> Homo sapiens <400> 262 gtgtcctgyc cattctcagk c

<210> 263			
<211> 22 <212> DNA			
<213> Homo	sapiens		
<400> 263	ccattctcag	kc	22
ggrgreergy	ccaccccag		<u>.</u> .
<210> 264 <211> 23			
<211> 25 <212> DNA			
<213> Homo	sapiens		
(400> 064			
	yccattctca	akc	23
~gg-gc-c-cg	700000000		
(010) 065			
<210> 265 <211> 24			
<212> DNA			
<213> Homo	sapiens		
<400> 265			
	gyccattctc	agkc	24
J J J	21		
<210> 266			
<211> 25			
<212> DNA			
<213> Homo	sapiens		
<400> 266			
	tgyccattct	cagkc	25
<210> 267			
<211> 19			
<212> DNA			
<213> Homo	sapiens		
<400> 267			
tcacatgggt	ggtcctagg	-	19
<210> 268			
<211> 20			
<212> DNA <213> Homo	saniens		
(213) Homo	зартепз		
<400> 268			
gtcacatggg	tggtcctagg		20
<210> 269			
<211> 21			
<212> DNA <213> Homo	sapiens		
	1		

<400> 269 ggtcacatgg gtggtcctag g	21
<210> 270 <211> 22 <212> DNA <213> Homo sapiens	
<400> 270 tggtcacatg ggtggtccta gg	22
<210> 271 <211> 23 <212> DNA <213> Homo sapiens	
<400> 271 ctggtcacat gggtggtcct agg	23
<210> 272 <211> 24 <212> DNA <213> Homo sapiens	
<400> 272 kctggtcaca tgggtggtcc tagg	24
<210> 273 <211> 25 <212> DNA <213> Homo sapiens	
<400> 273 gkctggtcac atgggtggtc ctagg	25
<210> 274 <211> 20 <212> DNA <213> Homo sapiens	
<400> 274 tsccatgara gatgcmaagc	20
<210> 275 <211> 21 <212> DNA <213> Homo sapiens	
<400> 275 gtsccatgar agatgcmaag c	21
<210> 276 <211> 22 <212> DNA	

<213> Homo	caniens		
	Sapieno		
<400> 276 tgtsccatga	ragatgcmaa	gc . 2	22
<210> 277			
<211> 23			
<212> DNA <213> Homo	sapiens		
<400> 277			
gtgtsccatg	aragatgcma	age 2	23
<210> 278			
<211> 24 <212> DNA			
<213> Homo	sapiens		
<400> 278	garagatgcm	aage 2	24
55-50000	3 a 2 a 3 a a 3 a a		
<210> 279 <211> 25			
<212> DNA			
<213> Homo	sapiens		
<400> 279 gggtgtscca	tgaragatgc	maagc 2	25
<210> 280 <211> 20			
<212> DNA <213> Homo	sapiens		
<400> 280			
	actettecea	2	20
<210> 281			
<211> 21			
<212> DNA <213> Homo	sapiens		
<400> 281			
tgwawtttct	gactcttccc	a 2	21
<210> 282			
<211> 22 <212> DNA			
<213> Homo	sapiens		
<400> 282	tgactcttcc	ca 2	22
2 - y 	J	-	
<210> 283			

<211> 23 <212> DNA <213> Homo sapiens	
<400> 283 cctgwawttt ctgactette eca	23
<210> 284 <211> 24 <212> DNA <213> Homo sapiens	
<400> 284 geetgwawtt tetgaetett eeca	24
<210> 285 <211> 25 <212> DNA <213> Homo sapiens	
<400> 285 egeetgwawt ttetgaetet teeca	25
<210> 286 <211> 20 <212> DNA <213> Homo sapiens	
<400> 286 gtgcctgtgt ccaggetgge	20
<210> 287 <211> 21 <212> DNA <213> Homo sapiens	
<400> 287 ggtgcctgtg tccaggctgg c	21
<210> 288 <211> 22 <212> DNA <213> Homo sapiens	
<400> 288 aggtgcctgt gtccaggctg gc	22
<210> 289 <211> 23 <212> DNA <213> Homo sapiens	
<400> 289 caggtgcctg tgtccaggct ggc	23

<210> 290 <211> 24 <212> DNA <213> Homo sapiens	
<400> 290 ccaggtgcct gtgtccaggc tggc	24
<210> 291 <211> 25 <212> DNA <213> Homo sapiens	
<400> 291 cccaggtgcc tgtgtccagg ctggc	25
<210> 292 <211> 20 <212> DNA <213> Homo sapiens	
<400> 292 tggcgtctgg gttctgtgcc	20
<210> 293 <211> 21 <212> DNA <213> Homo sapiens	
<400> 293 ctggcgtctg ggttctgtgc c	21
<210> 294 <211> 22 <212> DNA <213> Homo sapiens	
<400> 294 gctggcgtct gggttctgtg cc	22
<210> 295 <211> 23 <212> DNA <213> Homo sapiens	
<400> 295 ggctggcgtc tgggttctgt gcc	23
<210> 296 <211> 24 <212> DNA <213> Homo sapiens	
<400> 296	

aggctggcgt ctgggttctg tgcc	24
<210> 297 <211> 25 <212> DNA <213> Homo sapiens	
<400> 297 caggetggeg tetgggttet gtgee	25
<210> 298 <211> 20 <212> DNA	23
<213> Homo sapiens	
<400> 298 ctcaggatrg tcacatggsc	20
<210> 299 <211> 21 <212> DNA <213> Homo sapiens	
<400> 299 totcaggatr gtcacatggs c	21
<210> 300 <211> 22 <212> DNA <213> Homo sapiens	
<400> 300 ttctcaggat rgtcacatgg sc	22
<210> 301 <211> 23 <212> DNA <213> Homo sapiens	
<400> 301 rttctcagga trgtcacatg gsc	23
<210> 302 <211> 24 <212> DNA <213> Homo sapiens	
<400> 302 crttctcagg atrgtcacat ggsc	24
<210> 303 <211> 25 <212> DNA <213> Homo sapiens	

-45-

<400> 303 ccrttctcag	gatrgtcaca	tggsc	25
<210> 304 <211> 20 <212> DNA <213> Homo	sapiens		
<400> 304 scaagagaga	wrcaaagtgt		20
<210> 305 <211> 21 <212> DNA <213> Homo	sapiens		
<400> 305 cscaagagag	awrcaaagtg	t	21
<210> 306 <211> 22 <212> DNA <213> Homo	sapiens		
<400> 306 tcscaagaga	gawrcaaagt	gt	22
<210> 307 <211> 23 <212> DNA <213> Homo	sapiens		
<400> 307 gtcscaagag	agawrcaaag	tgt	23
<210> 308 <211> 24 <212> DNA <213> Homo	sapiens		
<400> 308 tgtcscaaga	gagawrcaaa	gtgt	24
<210> 309 <211> 25 <212> DNA <213> Homo	sapiens		
<400> 309 gtgtcscaag	agagawrcaa	agtgt	25
<210> 310 <211> 22			

<212> DNA <213> Homo	sapiens		`			
<400> 310 acccgcgggg	atttttggcc	tc				22
<210> 311 <211> 21 <212> DNA <213> Homo	sapiens					
<400> 311 ttgggcagac	cctcatgctg	С				21
<pre><210> 312 <211> 20 <212> DNA <213> Homo</pre>	sapiens					
<400> 312 tcggcagccc	ctcatgctgt					20
<210> 313 <211> 20 <212> DNA <213> Homo	sapiens					
<400> 313 catctcaggg	tgmrgggctt					20
<210> 314 <211> 27 <212> DNA <213> Homo	sapiens					
<400> 314 ygmccaaccc	gcggggattt	tggcctc				27
<210> 315 <211> 240 <212> DNA <213> Homo	sapiens					
tegeceaeag ceegggagag	ccggcccggg tctccgggtc gcccaggcgc cggggcgggc	cgagatccac ctttacccgg	cccgaagccg tttcattttc	cgggaccccg agtttaggcc	agaccettge aaaaatcece	120 180
<210> 316 <211> 241 <212> DNA <213> Homo	sapiens					
<400> 316						

```
gtgagtgacc ccggcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
tegeceacag teteegggte eqagateege eeegaageeg egggaeeeeg agaceettge 120
eccgggagag geecaggege etttaceegg ttteatttte agtttaggee aaaaateece 180
ccaggttggt cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccgggcca 240
                                                                   241
<210> 317
<211> 241
<212> DNA
<213> Homo sapiens
<400> 317
gtgagtgace eeggeeeggg gegeaggtea egacetetea teeeceaegg aegggeeagg 60
tegeccaeag teteegggte egagateege eeegaageeg egggaceeeg agaceettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccaggttggt cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccgggcca 240
<210> 318
<211> 241
<212> DNA
<213> Homo sapiens
<400> 318
gtgagtgacc ccggcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
tegeceacag teteegggte egagateege eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccaggttggt cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccgggcca 240
                                                                   241
<210> 319
<211> 241
<212> DNA
<213> Homo sapiens
<400> 319
gtgagtgacc ccggcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
tegeceacag teteegggte egagateege eeegaageeg egggaeeeeg agaceettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccaggttggt cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccgggcca 240
                                                                   241
<210> 320
<211> 241
<212> DNA
<213> Homo sapiens
<400> 320
gtgagtgacc ccggcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
tegeccaeag teteegggte egagateege eeegaageeg egggaeeeeg agaceettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccaggttggt cggggcgggg cggggctcgg gggaccgggc tgaccgcggg gtccgggcca 240
                                                                   241
<210> 321
<211> 240
```

```
<212> DNA
<213> Homo sapiens
<400> 321
gtgagtgacc ccggcccggg cgcaggtcac gacctctcat ccccacgga cgggccaggt 60
cgcccacagt ctccgggtcc gagatccgcc ccgaagccgc gggaccccga gaccettgcc 120
ccgggagagg cccaggcgcc tttacccggt ttcattttca gtttaggcca aaaatccccc 180
cgggttggtc ggggcggggc ggggctcggg ggaccgggct gaccgcgggg tccggggccag 240
<210> 322
<211> 241
<212> DNA
<213> Homo sapiens
<400> 322
gtgagtgace eeggeeeggg gegeaggtea egaceeetea teeeeeaegg aegggeeagg 60
tegeceaeag teteegggte egagateege eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggcgggg cggggctcgg gggaccgggc tgacctcggg gtccgggcca 240
<210> 323
<211> 241
<212> DNA
<213> Homo sapiens
<400> 323
gtqaqtqacc ccqqcccqqq qcqcaqqtca cqacccctca tcccccacqg acqqqccaqg 60
tegeceaeag teteegggte egagateege eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
cegggttggt cggggegggg cggggetegg gggaceggge tgaceteggg gtcegggeca 240
<210> 324
<211> 241
<212> DNA
<213> Homo sapiens
<400> 324
gtgagtgacc ceggeceggg gegeaggtea egacecetea tececeaegg aegggeeagg 60
tegeceaeag teteegggte egagateege eeegaageeg egggaeeeeg agaeeettye 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggcgggg cggggctcgg gggaccgggc tgacctcggg gtccgggcca 240
                                                                   241
g
<210> 325
<211> 241
<212> DNA
<213> Homo sapiens
<400> 325
gtgagtgace eeggeeeggg gegeaggtea egaceetea teeeceaegg aegggeeagg 60
tegeceaeag teteegggte egagateege eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
cegggttggt eggggegggg eggggetegg gggaceggge tgaceteggg gteegggeea 240
```

```
<210> 326
<211> 240
<212> DNA
<213> Homo sapiens
<400> 326
gtgagtgacc ceggeceggg egeaggteac gacceeteat eeceeaegga egggeeaggt 60
egeceaeagt eteegggtee gagateegee eegaageege gggaeeeega gaeeettgee 120
ccgggagagg cccaggcgcc tttacccggt ttcattttca gtttaggcca aaaatccccc 180
egggttggte ggggegggge ggggeteggg ggaeeggget gaeetegggg teegggeeag 240
<210> 327
<211> 240
<212> DNA
<213> Homo sapiens
<400> 327
gtgagtgacc ceggeceggg egeaggteac gacceteat ceeetaegga egggeeaggt 60
cgcccacagt ctccgggtcc gagatccacc ccgaagccgc gggaccccga gacccttgcc 120
ccgggagagg cccaggcgcc tttagccggt ttcattttca gtttaggcca aaaatccccc 180
cgggtgggtc ggggcggggc ggggctcggg ggaccgggct gaccgcgggg téggggccag 240
<210> 328
<211> 240
<212> DNA
<213> Homo sapiens
<400> 328
gtgagtgacc ceggeegggg egeaggteac gaccecteat ecceaegga egggeeaggt 60
egeceacagt eteegggtee gagatecace eegaageege gggaceeega gaceettgae 120
ccgggagagg cccaggcgcc tttacccggt ttcattttca gtttaggcca aaaattcccc 180
cgggttggtc ggggctgggc ggggctcggg ggactgggct gaccgcgggg tcggggccag 240
<210> 329
<211> 240
<212> DNA
<213> Homo sapiens
<400> 329
gtgagtgacc ccggccgggg cgcaggtcac gacccctcat cccccacgga cgggccaggt 60
cgcccacagt ctccgggtcc gagatccacc ccgaagccgc gggaccccga gacccttgac 120
ccgggagagg cccaggcgcc tttacccggt ttcattttca gtttaggcca aaaattcccc 180
cgggttggtc ggggctgggc ggggctcggg ggactgggct gaccgcgggg tcggggccag 240
<210> 330
<211> 241
<212> DNA
<213> Homo sapiens
<400> 330
gtgagtgacc ccgcccgggg gcgcaggtca cgacccttca tcccccacgg acgggccagg 60
tegeceacag teteegggte egagateeac eeegaageeg egggaceeeg agaeeettga 120
ceegggagag geeeaggege etttaceegg ttteatttte agtttaggee aaaaatteee 180
cegggttggt cggggctggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
```

```
<210> 331
  <211> 241
  <212> DNA
  <213> Homo sapiens
 <400> 331
 gtgagtgacc ccggccgggg gcgcaggtca ggacccctca tcccccacgg acgggccagg 60
 tegeceacag teteegggte egagateeac eeegaageeg egggaeeeeg agaceettge 120
 cccgggagag gcccaggege etttacccgg tttcattttc agtttaggec aaaaatcccc 180
 ccgggttggt cggggctggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
 <210> 332
 <211> 241
 <212> DNA
 <213> Homo sapiens
 <400> 332
 gtgagtgaec ceggeeeggg gegeaggtea egaceetea teeeeeaegg aegggeeagg 60
 tegeceacag teteegggte egagateeae eeegaageeg egggaeteeg agaceettgt 120
 cccgggagag gcccaggege ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
 ccgggttggt cggggcgggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
                                                                    241
 <210> 333
 <211> 241
 <212> DNA
 <213> Homo sapiens
 <400> 333
gtgagtgacc ccggcccggg gcgcaggtca cgacccctca tcccccacgg acgggccggg 60
tegeccacag teteegggte egagatecae eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc cttaacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
<210> 334
<211> 241
<212> DNA
<213> Homo sapiens
<400> 334
gtgagtgacc ccggcccggg gcgcaggtca cgacccctca tcccccacgg acgggccggg 60
tegeceacag teteegggte egagateeac eeegaageeg egggaceeeg agaceettge 120
cccgggagag gcccaggege ettaacccgg tttcattttc agtttaggec aaaaatcccc 180
cegggttggt eggggeeggg eggggetegg gggaetggge tgaeegeggg gteggggeea 240
g
                                                                   241
<210> 335
<211> 241
<212> DNA
<213> Homo sapiens
<400> 335
gtgagtgacc ccggcccggg gcgcaggtca cgacccctca tcccccacgg acgggccggg 60
tegeceacag teteegggte egagateeae eeegaageeg egggaeeeeg agaceettge 120
```

```
cccgggagag qcccaggegc cttaacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt eggggccggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
                                                                   241
<210> 336
<211> 241
<212> DNA
<213> Homo sapiens
<400> 336
gtgagtgacc ceggeceggg gegeaggtea egacecetea tececeaegg aegggeeggg 60
tegeceacag teteegggte egagateeac eeegaageeg egggaceeeg agaceettge 120
occgggagag geocaggege ettaaceegg ttteatttte agtttaggee aaaaateeee 180
ccgggttggt cggggccggg cggggctcgg gggactgggc tgaccgcggg gtcggggcca 240
g
<210> 337
<211> 241
<212> DNA
<213> Homo sapiens
<400> 337
gtgagtgacc ceggeceggg gegeaggtea egaccetea tececeaegg aegggeeagg 60
tggcccacag teteogggte egagatecae eccgaageeg egggaeeeeg agaeeettge 120
eccgggagag geceaggege etttaceegg ttteatttte agtttaggee aaaaateeee 180
cegggttggt eggggeeggg eagggetegg gggaetggge tgaeegeggg gteggggeea 240
                                                                   241
<210> 338
<211> 241
<212> DNA
<213> Homo sapiens
<400> 338
gtgagtgacc ccggcccggg gcgcaggtca cgacccctca tcccccacgg acgggccagg 60
tegeceaeag teteegggte egagateege eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcgggqcca 240
<210> 339
<211> 240
<212> DNA
<213> Homo sapiens
<400> 339
gtgagtgacc ceggcegggg cgeaggteag gacceteat ceceaegga egggeeaggt 60
cgcccacagt ctccgggtcc gagatccacc ccgaagccgc gggaccccga gaccettgcc 120
ccgggagagg cccaggcgcc tttacccggt ttcattttca gtttaggcca aaaatcccc 180
cgggttggtc ggggccggac ggggctcggg ggactgggct gaccgtgggg tcggggccag 240
<210> 340
<211> 241
<212> DNA
<213> Homo sapiens
```

```
<400> 340
gtgagtgacc ccggcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
tegeccaeag teteegggte egagateeae eeegaageeg egggaceeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
<210> 341
<211> 241
<212> DNA
<213> Homo sapiens
<400> 341
gtgagtgacc ccggcccggg gcgcaggtca cgacctctca tcccccacgg acgggccggg 60
tegeccaeag teteegggte egagateeae eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
<210> 342
<211> 241
<212> DNA
<213> Homo sapiens
<400> 342
gtgagtgacc ccagcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
teacecaeag teteegggte egagateeae eeegaageeg egggaceeeg agaceettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
<210> 343
<211> 241
<212> DNA
<213> Homo sapiens
<400> 343
gtgagtgacc ccagcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
teacecacag teteegggte egagateeae eeegaageeg egggaeeeeg agaeeettge 120
cccgggagag gcccaggcgc ctttacccgg tttcattttc agtttaggcc aaaaatcccc 180
cegggttggt eggggeegga eggggetegg gggaetggge tgaeegtggg gteggggeea 240
g
<210> 344
<211> 241
<212> DNA
<213> Homo sapiens
<400> 344
gtgagtgacc ccagcccggg gcgcaggtca cgacctctca tcccccacgg acgggccagg 60
teacceaeag teteegggte egagateeae eeegaageeg egggaeeeeg agaeeettge 120
eccgggagag geccaggege etttaceegg tttcatttte agtttaggee aaaaateeee 180
ccgggttggt cggggccgga cggggctcgg gggactgggc tgaccgtggg gtcggggcca 240
```

```
<211> 244
<212> DNA
<213> Homo sapiens
<400> 345
gtgagtgacc ceggeceggg gegeaggtea egacteecea teccecaegt aeggeeeggg 60
tegeceegag teteegggte egagateege eeeegaggee gegggaeeeg eeeagaeeet 120
egaceggega gageeceagg egegtttace eggttteatt tteagttgag gecaaaatee 180
ccgcgggttg gtcggggcgg ggcggggctc ggggggacgg ggctgaccgc ggggcctggg 240
ccag
<210> 346
<211> 251
<212> DNA
<213> Homo sapiens
<400> 346
gtgagtgacc ceggeceggg gegeaggtte acgaetecee atececeaeg taeggeeegg 60
gtcgccccga gtctccgggt ccgagatccg ccccctgag gccgcgggac ccgcccagac 120
cctcgaccgg cgagagcccc aggcgcgttt acccggtttc attttcagtt gaggccaaaa 180
teecegeggg ttggtegggg eggggegggg eggggetegg gggaegggge tgaeegeggg 240
gcctgggcca g
<210> 347
<211> 246
<212> DNA
<213> Homo sapiens
<400> 347
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
tegececega gteteegggt eegagateeg eeeceetgag geeggggaee egeceagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcggt tggtcggggc ggggcggggc tcggggggac ggggctgacc gcggggccgg 240
ggccag
                                                                   246
<210> 348
<211> 242
<212> DNA
<213> Homo sapiens
<400> 348
gtgagtgace ceggeceggg gegeaggtea egacteecea teececaegt aeggeceggg 60
tegeceegag teteegggte egagateege eecegaggee gegggaeeeg eecagaeeet 120
gaccggcgag agccccaggc gcgtttaccc ggtttcattt tcagttgagg ccaaaatccc 180
cgcgggttgg tcggggcggg gcggggctcg ggggacgggg ctgaccgcgg ggccggggcc 240
                                                                   242
ag
<210> 349
<211> 246
<212> DNA
<213> Homo sapiens
<400> 349
gtgagtgacc ceggeceggg gegeaggtea egacteecea teeceeaegt aeggeeeggg 60
tegeccegag teteegggte egagateege eeecetgagg eegegggaee egeceagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggtc ggggctgacc gcggggccgg 240
```

```
246
ggccag
<210> 350
<211> 246
<212> DNA
<213> Homo sapiens
<400> 350
gtgagtgace ceggeeeggg gegeaggtea egacteecea teececaegt aeggeeeggg 60
tegeceegag teteegggte egagateege eeceetgagg eegegggaee egeceagaee 120
ctcgaccggc gagageccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
eccegegggt tggtegggge ggggegggge teggggggae gggaetgaee geggggeegg 240
ggccag
<210> 351
<211> 243
<212> DNA
<213> Homo sapiens
<400> 351
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tcccccacgt acgggccggg 60
tegeceegag teteegggte egagateege eeeegaggee gegggaeeeg eeeagaeeet 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgcgggttg gtcggggcgg ggcggggctc gggggacggg gctgaccgcg gggccggggc 240
                                                                   243
<210> 352
<211> 246
<212> DNA
<213> Homo sapiens
<400> 352
gtgagtgacc ccggcccggg gcgcaggtca cgactccca tccccacgt acggcccggg 60
tegeceegag teteegggte egagateege eeceetgagg eegegggaee egeceaaace 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gggctgaccg cggggccggg 240
gccagg
<210> 353
<211> 245
<212> DNA
<213> Homo sapiens
<400> 353
gtgagtgace ceggeceggg gegeaggtea egacteecea tececeaegt aeggecegag 60
tegeceegag teteegggte egagateege eeecetgagg eegegggace egeceaaace 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
eccegegggt tggtegggge ggggegggge tegggggaeg gggetgaeeg eggggeeggg 240
                                                                   245
gccag
<210> 354
<211> 246
<212> DNA
<213> Homo sapiens
<400> 354
```

tegeceegag etegaeegge	ccggcccggg tctccgggtc gagagcccca tggtcggggc	cgagatccgc ggcgcgttta	ctccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccagacc aggccaaaat	120 180
<210> 355 <211> 245 <212> DNA <213> Homo	sapiens					
tegeeeegag etegaeegge	ceggeceggg teteegggte gagageeca tggtegggge	cgagatccgc ggcgcgttta	ctccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccagacc aggccaaaat	60 120 180 240 245
<210> 356 <211> 245 <212> DNA <213> Homo	sapiens					
tegeceegag ctegacegge	ceggeeeggg teteegggte gagageeca tggtegggge	cgagatccgc ggcgcgttta	ctccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccagacc aggccaaaat	120 180
<210> 357 <211> 246 <212> DNA <213> Homo	sapiens					
tegeceegag ctegacegge	ccggcccggg tctccgggtc gagagccca tggtcggggc	cgagatccgc ggcgcgttta	ctccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccagacc aggccaaaat	120
<210> 358 <211> 246 <212> DNA <213> Homo	sapiens					
tegeccegag etegacegge	ceggeeeggg teteegggte gagageeca tggtegggge	cgagatccgc ggcgcgttta	ctccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccagacc aggccaaaat	120 180
<210> 359 <211> 246						

```
<212> DNA
<213> Homo sapiens
<400> 359
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tcccccacgt acggcccggg 60
tegeceegag teteegggte egagateege eteeetgagg eegegggaee egeceagaee 120
ctcgaccggc gagageecca ggegegttta eceggtttea tttteagtta aggeeaaaat 180
cecegegggt tggtegggge ggggegggge teggggggae ggggetgaee geggggeegg 240
ggccag
<210> 360
<211> 245
<212> DNA
<213> Homo sapiens
<400> 360
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tcccccacgt acggcccggg 60
tegeccegag teteegggte egagateege eteeetgagg eegegggaee egeceagaee 120
ctcgaccggc gagageccca ggegegttta eccggtttca ttttcagttg aggecaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gtgctgaccg cggggccggg 240
gccag
<210> 361
<211> 245
<212> DNA
<213> Homo sapiens
<400> 361
gtgagtgacc ceggeeeggg gegeaggtea egaeteeeca teeeceaegt aeggeeeggg 60
tegeecegag teteegggte egagateege etecetgagg eegegggaee egeecagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
eccegegggt tggtegggge ggggegggge tegggggaeg gtgetgaeeg eggggeeggg 240
gccag
<210> 362
<211> 245
<212> DNA
<213> Homo sapiens
<400> 362
gtgagtgace ceggeeeggg gegeaggtea egaeteecea teececaegt aeggeeeggg 60
tegeceegag teteegggte egagateege eteeetgagg eegegggaee egeceagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ceeegegggt tggtegggge ggggegggge tegggggaeg gtgetgaeeg eggggeeggg 240
                                                                   245
gccag
<210> 363
<211> 245
<212> DNA
<213> Homo sapiens
<400> 363
gtgagtgacc ceggeceggg gegeaggtea egacteecea tececeaegt aeggeeeggg 60
tegeccegag teteegggte egagateege eteeetgagg eegegggaee egeceagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
eccegegggt tggtegggge ggggegggge tegggggaeg gtgetgaeeg eggggeeggg 240
                                                                   245
gccag
```

```
<210> 364
<211> 245
<212> DNA
<213> Homo sapiens
<400> 364
gtgagtgacc ceggeceggg gegeaggtea egacteecea tececeaegt aeggeceggg 60
tegeceegag teteegggte egagateege eteeetgagg eegegggaee egeceagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggact gggctgaccg cggggccggg 240
gccag
<210> 365
<211> 244
<212> DNA
<213> Homo sapiens
<400> 365
gtgagtgacc ceggeceggg gegeaggtea egacteecea tececeaegt aeggeeeggg 60
tegeceegag teteegggte egagateege eeeegaggee gegggaeeeg eeeagaeeet 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgcgggttg gtcggggcgg ggcggggctc ggggggacgg ggctgaccgc gggggcgggg 240
ccag
<210> 366
<211> 244
<212> DNA
<213> Homo sapiens
<400> 366
gtgagtgacc ceggeceggg gegeaggtea egacteecea tececeaegg aeggeeeggg 60
tegeceegag teteegggte egagateege eeeegaggee gegggaeeeg eeeagaeeet 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag gccaaaatcc 180
ccgcgggttg gtcggggcgg ggcggggctc ggggggacgg ggctgaccgc gggggcgggg 240
ccag
                                                                   244
<210> 367
<211> 245
<212> DNA
<213> Homo sapiens
<400> 367
gtgagtgace ceggeeeggg gegeaggtea egacteeeca teeeceaegt aeggeeeggg 60
tegeceegag teteegggte egagateege eteeetgagg eegegggaee egeeeagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgegggt tggteggggc ggggeggggc teggggggac ggggetgacc gegggggegg 240
ggccg
<210> 368
<211> 246
<212> DNA
<213> Homo sapiens
<400> 368
gtgagtgacc coggcccggg gcgcaggtca cgactcccca tccccacgt acggcccggg 60
```

ctcgaccggc	tctccgggtc gagagcccca tggtcggggc	ggcgcgttta	cccggcttca	ttttcagttg	aggccaaagt	180
<210> 369 <211> 245 <212> DNA <213> Homo	sapiens					
tegeceegag etegaeegge	ceggeeeggg teteegggte gagageeeca tggtegggge	cgagatecge ggegegttta	ctccctgagg cccggtttca	ccgcgggacc ttttcagtkg	cgcccagacc aggccagaat	60 120 180 240 245
<210> 370 <211> 245 <212> DNA <213> Homo	sapiens					
tcgccccgag ctcgaccggc	ccggcctggg tctccgggtc gagagcccca tggtcggggc	cgagatccgc ggcgcgttta	ccccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccaaacc aggccaaaat	120 180
<210> 371 <211> 245 <212> DNA <213> Homo	sapiens					
tegeceegag etegacegge	ccggcctggg tctccgggtc gagagcccca tggtcggggc	cgagatccgc ggcgcgttta	ccccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccaaacc aggccaaaat	120 180
<210> 372 <211> 245 <212> DNA <213> Homo	sapiens					
tcgccccgag ctcgaccggc	ccggcctggg tctccgggtc gagagccca tggtcggggc	cgagatccgc ggcgcgttta	ccccctgagg cccggtttca	ccgcgggacc ttttcagttg	cgcccaaacc aggccaaaat	120 180
<210> 373 <211> 245 <212> DNA						

```
<213> Homo sapiens
<400> 373
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgt acggcccgga 60
tegeceegag teteegggte egagateege eeeeetgagg eegegggaee egeceaaace 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggacg gggctgaccg cggggcctgg 240
gccag
<210> 374
<211> 245
<212> DNA
<213> Homo sapiens
<400> 374
gtgagtgace ceggeeeggg gegeaggtea egacteecea teeceeacgt aeggeeeggg 60
tegeceegag teteegggte egagateega eeceetgagg eegegggaee egeceagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tggtcggggc ggggcggggc tcgggggact gggctgatcg cggggccggg 240
gccag
<210> 375
<211> 245
<212> DNA
<213> Homo sapiens
<400> 375
gtgagtgacc ceggeeeggg gegeaggtea egaeteeeca teeeceaegt aeggeeeggg 60
tegececega gteteegggt eegagateeg eeteeetgag geegegggae eegeeeagae 120
cctcgaccgg cgagageccc aggegegttt acceggttte attttcagtt gaggecaaaa 180
teccegeggg ttggtegggr eggggeggg etegggggae tgggetgaee gegggaeegg 240
gccag
<210> 376
<211> 243
<212> DNA
<213> Homo sapiens
<400> 376
gtgagtgacc ceggeceggg gegeaggtea egactteeca tececeaegt aeggeeeggg 60
tegecegagt eteeggggte egagateaeg eeteestgag geegegggae eegeeeagae 120
cctcgaccgg cgagagcccc aggcgcgttt acccggtttc attttcagtt gaggccaaaa 180
teeeegeggg ttggtegggg egggeggget egggggaegg ggetgaeege gggeegggge 240
                                                                   243
cag
<210> 377
<211> 241
<212> DNA
<213> Homo sapiens
<400> 377
gtgaccccgg cccggggcgc aggtcacgac tccccatccc ccacgtacgg cccgggtcgc 60
coogagtete egggteegag atecgeetee etgaggeege gggaceegee eagaceeteg 120
accggcgaga gcccaaggcg cgtttacccg gtttcatttt cagttgaggg caaaatcccc 180
gegggttggt eggggeggg eggggetegg gggaeggtge tgaeegeggg geeggggeaa 240
                                                                   241
g
```

```
<210> 378
<211> 246
<212> DNA
<213> Homo sapiens
<400> 378
gtgagtgace teggeeeggg gegeaggtea egaeteecea teeceeaegg aeggeeeggg 60
tegeceegag teteegggte egagateege eteeetgagg eegegggaee egeceagaee 120
ctcgaccggc gagagcccca ggcgcgttta cccggtttca ttttcagttg aggccaaaat 180
ccccgcgggt tgggcggggc ggggcggggc tcggggggac tgggctgacc gcgggggcgg 240
ggccag
<210> 379
<211> 244
<212> DNA
<213> Homo sapiens
<400> 379
gtgagtgacc ccggcccggg gcgcaggtca cgactccca tccccacgt acggcccggg 60
tegeceegag teteegggte egagateege eeeegaagge egegggaeee egeeagaace 120
etgaceggeg agageeccag egegtttace eggttteatt tteagttgag gecaaaatee 180
ecgegggttg gteggggegg ggeggggete ggggggaegg ggetgaeege ggggeegggg 240
ccaa
<210> 380
<211> 245
<212> DNA
<213> Homo sapiens
<400> 380
gtgagtgacc ceggeceggg gegeaggtea egacteecea tececeaegg aeggeeeggg 60
tegeceegag tettegggte ceagateege tteettgagg eegeggaeee geecagaeet 120
tegaceggeg agagececag gegegtttae eeggttteat ttteagttga ggeeaaaate 180
cccgcgggtt ggtcggggcg gggcggggct cggggggact gggctgaccg cgggggcggg 240
ccagg
<210> 381
<211> 239
<212> DNA
<213> Homo sapiens
<400> 381
gtgagtgacc ccggcccggg gcgcaggtca cgactcccca tccccacgta cggcccgggt 60
egecegagtt eegggteega gateeaeeee eetgaggeeg etgggaeeeg eecagaeeet 120
cgaccggcga gagccccagg cgcgtttacc cggtttcatt ttcagttgag accaaaatcc 180
ecgegggttg gteagggegg gaeggggete ggggaegggg etgaeegggg eegggeeag 239
<210> 382
<211> 244
<212> DNA
<213> Homo sapiens
<400> 382
gtgagtgacc ccggcctggg gcgcaggtca cgacccctcc ccaaccccga cgtacggccc 60
gggtctcctc gagtctctag gtccgagatc cgccccaagg ccgcgggacc cgcccagaac 120
ctegacegea gagageeeea ggegaettta eeeggtttea tttteagttg aggteaaaat 180
```

ccccgcgggt ccag	tggtcggggc	agg gcggggc	tegggggaet	ggctgaccgc	gagggctggg	240 244
<210> 383 <211> 246 <212> DNA <213> Homo	sapiens					
gggtegeeee ctegaeeggg	ceggeceggg gagteteece gagageceea tggtegggae	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	
<210> 384 <211> 246 <212> DNA <213> Homo	sapiens					
gggtcgcccc ctcgaccgga	ccggeccggg gagteteece gagagececa tggtcgggae	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	
<210> 385 <211> 246 <212> DNA <213> Homo	sapiens					
gggtegeeee ctegaeegga	ceggeeeggg gagteteeeg gagageeeea tggtegggge	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	60 120 180 240 246
<210> 386 <211> 246 <212> DNA <213> Homo	sapiens					
gggtcgcccc ctcgaccgga	ceggeeeggg gagteteeeg gagageeeca tggtegggge	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	120 180
<210> 387 <211> 246 <212> DNA <213> Homo	sapiens					

gggtegeeee etegaeegga	ccggcccggg gagtctcccg gagagcccca tggtcggggc	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ttgcggaacc ttttcagttt	cgcccagacc aggccaaaat	120
<210> 388 <211> 246 <212> DNA <213> Homo	sapiens					
gggtegeeee etegaeegga	ceggeeeggg gagteteeeg gagageeeea tggtegggge	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	
<210> 389 <211> 245 <212> DNA <213> Homo	sapiens					
gggtegeeee etegaeegga	ceggeeeggg gagteteegg gagageeeca tggtegggge	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	60 120 180 240 245
<210> 390 <211> 245 <212> DNA <213> Homo	sapiens					
gggtcgcccc ctcgaccgga	ccggcccggg aagtctcccg gagagcccca tggtcggggc	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	120 180
<210> 391 <211> 245 <212> DNA <213> Homo	sapiens					
gggtcgcccc ctcgaccgga	ccggcccggg aagtctcccg gagagccca tggtcggggc	gtctgagatc gtcaccttta	caccccgagg cccggtttca	ctgcggaacc ttttcagttt	cgcccagacc aggccaaaat	120 180

```
<211> 246
<212> DNA
<213> Homo sapiens
<400> 392
qtgagtgace eeggeeeggg gegeaggtea egaceeetee teateeecea eggaeggeee 60
gggtcgcccc aagtctcccg gtctgagatc caccccgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagagccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgccggt tggtcgggac tggggcgggg ctcgggggac ggggctgacc acgggggcgg 240
ggccag
<210> 393
<211> 246
<212> DNA
<213> Homo sapiens
<400> 393
gtgagtgacc ccagcccggg gcgcaggtca cgacccctcc ccatccccca cggacqgccc 60
gggtcqcccc gagtctcccg gtctgagatc ctccccgagg ctgcggaacc cgcccagacc 120
ctegacegga gagageeeta gtegeettta eeeggtttea tttteagttt aggeeaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acgggggcgg 240
ggccag
<210> 394
<211> 250
<212> DNA
<213> Homo sapiens
<400> 394
gtgagtgacc ccggcccggg gcgcagqtca cgacccctcc ccatccccca cggacqgccc 60
gggtcgcccc gagtctcccc gtctgagatc caccccaagg tggatctgcg gaacccgccc 120
agaccetega ceggagagag ecceagtege etttaceegg ttteatttte ggtttaggee 180
aaaatccccg cgggttggtc ggggcggggc ggggctcggg ggactgggct gaccgcgggg 240
gcggggccag
                                                                   250
<210> 395
<211> 245
<212> DNA
<213> Homo sapiens
<400> 395
gtgagtgacc ccggcccggg gcgcaggtca cgacccctcc ccatccccca cggacggccc 60
gggtcgcccc gagtctcccg gtctgagatc caccccgagg ctgcggaacc cgcccagacc 120
ctcggccgga gagagcccca gtcaccttta cccggtttca ttttcagttt aggccaaaat 180
ccccgcggtt tggtcggggc tggggcgggg ctcgcggacg gtgttgacca cgggggcggc 240
gccag
                                                                   245
<210> 396
<211> 600
<212> DNA
<213> Homo sapiens
<400> 396
gtaccagggg ccacggggcg cctccctgat cgcctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtcctgaggg 120
agaggaatcc tcctgggttt ccagatcctg taccagagag tgactctgag gttccgccct 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatcctcg 240
```

```
aatactgatg agtggttccc tttgacacac accggcagca gccttgggcc cgtgactttt 300
ceteteagge ettgttetet getteaeact caatgtgtgt gggggtetga gteeageact 360
tetgagteec teageeteea eteaggteag gaecaqaagt egetgtteec tetteaggga 420
ctagaatttt ccacggaata ggagattatc ccaggtgcct gtgtccaggc tqgtgtctgg 480
gttctgtgct cccttcccca tcccaqgtgt cctgtccatt ctcaaqatag ccacatgtgt 540
gctggaggag tgtcccatga cagatgcaaa atqcctgaat qttctgactc ttcctgacag 600
<210> 397
<211> 600
<212> DNA
<213> Homo sapiens
<400> 397
gtaccagggg ccacagggcg cctccctgat cgcctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatege cetecetetg gteetgaggg 120
agaggaatcc teetgggttt eeagateetg taccagagag tgaetetgag gtteegeeet 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatccctcg 240
aatactgatg agtggttccc tttgacacac accggcagca gccttgggcc cgtgactttt 300
ceteteagge ettgttetet getteacaet eaatgtgtgt gggggtetga gteeageaet 360
tetgagtece teageeteea eteaggteag gaeeagaagt egetgtteee tetteaggga 420
ctagaatttt ccacggaata ggagattatc ccaggtgcct gtgtccaggc tggtgtctgg 480
gttetgtget ceetteecca teecaggtgt eetgtecatt eteaaqataq eeacatgtgt 540
gctggaggag tgtcccatga cagatgcaaa atgcctgaat gttctgactc ttcctgacag 600
<210> 398
<211> 600
<212> DNA
<213> Homo sapiens
<400> 398
gtaccagggg ccacggggcg cctccctgat cgcctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtcctgaggg 120
agaggaatce teetgggttt ecagateetg taccagagag tgaetetgag gtteegeeet 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatccctcg 240
aatactgatg agtggttccc tttgacacac acaggcagca gccttgggcc cgtgactttt 300
ceteteagge ettgttetet getteaeact eaatgtgtgt gggggtetga gteeageact 360
tetgagteec teagecteea eteaggteag gaccagaagt egetgtteec tetteaggga 420
ctagaatttt ccacggaata ggagattatc ccaggtgcct gtgtccaggc tggtgtctgg 480
gttctgtgct cccttcccca tcccaggtgt cctgtccatt ctcaagatag ccacatgtgt 540
gctggaggag tgtcccatga cagatgcaaa atgcctgaat gatctgactc ttcctgacag 600
<210> 399
<211> 599
<212> DNA
<213> Homo sapiens
<400> 399
gtaccagggg ceacggggeg ectecetgat egectgtaga teteceggge tggeetecea 60
caaggagggg agacaattgg gaccaacact agaatatcgc cetecetetg gteetgaggg 120
agaggaatcc tcctgggttt ccagatcctg taccagagag tgactctgag gttccgccct 180
gctctctgac acaattaagg gataaaatct ctgaaggaat gacggtaaga cgatccctcg 240
aatactgatg agtggttccc tttgacacac accggcagca gccttgggcc cgtgactttt 300
ceteteagge ettgttetet getteaeact caatgtgtgt gggggtetga gteeageact 360
tetgagteec teageeteea eteaggteag gaceagaagt egetgtteec tetteaggga 420
ctagaatttc cacggaatag gagattatcc caggtgcctg tgtccaggct ggtgtctggg 480
ttctgtgctc ccttccccat cccaggtgtg ctgtccattc tcaagatagc cacatgtgtg 540
ctggaggagt gtcccatgac agatacccaa tgcctgtatg ttctgactct tcctgtcag 599
```

```
<210> 400
<211> 577
<212> DNA
<213> Homo sapiens
<400> 400
gtaccagggg ccacggagdg cetecetgat egectgtaga teteceggge tggeeteeca 60
caaggagggg agacatttgg gaccaacact agaatatcac cctccctctg gtcctgaggg 120
agaggactee teetgggtte eagateetgt accagagagt gactetgagg tteegeeetg 180
ctctctgaca caattaaggg ataaaatctc tgaaggagtg acgggaagac gatccctcga 240
atactgatga gtggttccct ttgacaccgg cagcagcctt gggcccgtga cttttcctct 300
caggeettgt tetetgette acacteaatg tgtgtggggg tetgagteea geacttetga 360
qtccctcage etecactcag qtcaggacca gaagtegetg tteccttete agggatagaa 420
gattatecea ggtgeetgtg tecaggetgg tgtetgggtt etgtgetete tteeceatee 480
egggtgteet gtecattete aagatgggea catgegtget ggtggagtgt cecatgacag 540
atgcaaaatg cctgaatttt ctgactcttc ccgtcag
                                                                   577
<210> 401
<211> 579
<212> DNA
<213> Homo sapiens
<400> 401
gtaccagggg ccacggggcg cctacctgat cgcctgtagg tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cetecetetg gteetgaggg 120
agaggaatee teetgggttt ceagateetg taccagagag tgaetetgag gtteegeeet 180
gctctctgac acaattaagg gataaaatct ctgacggaat gacggaaaga cgatccctcg 240
aatactgatg actggttccc tttgacaccg gcagcagcct tgggaccgtg acttttcctc 300
traggering tretetgett caracteaat gtgtgtgggg gtctgagter agraettetg 360
agteceteag cetecaetea ggteaggace agaagteget gtteeeteet eagggaatag 420
aagattatee caggtgeetg tgteeagget ggtgtetggg ttetgtgete tetteeeeat 480
cccgggtgtc ctgtccattc tcaagatggc cacatgcatg ctggtggagt gtcccatgac 540
agatgcaaaa tgcctgaatt ttctgactct tcccgtcag
<210> 402
<211> 579
<212> DNA
<213> Homo sapiens
<400> 402
gtaccagggg ccacggggcg cctccctgat cgcctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtcctgaggg 120
agaggaatee teetgggttt ceagateetg taceagagag tgactetgag gtteegeeet 180
gctctctgac acaattaagg gataaaatct ctgaaggagt gacgggaaga cgatccctcg 240
aatactgatg agtggttccc tttgacaccg gcagcagcct tgggcccgtg acttttcctc 300
teaggeettg ttetetgett caeacteaat gtgtgtgggg gtetgagtee ageacttetg 360
agteteteag cetecactea ggteaggace agaagteget gtteeettet eagggaatag 420
aagattatee eaggtgeetg tgteeagget ggtgtetggg ttetgtgete tetteeceat 480
ecceggetete etetecatte teaagatege cacategete etegagegagt eteccategae 540
agatgcaaaa tgcctgaatg ttctgactct tcctgtcag
                                                                   579
<210> 403
<211> 579
<212> DNA
<213> Homo sapiens
<400> 403
```

```
gtaccagggg ccacggggeg cctccctgat cgcctgtaga tctcccqqqc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcac cetecetetg gteetgaggg 120
agaggaatcc teetgggttt ceagateetg taccagagag tgactetgag gtteegeeet 180
gctctctgac tcaattaagg gataaaatct ctgaaggagt gacgggaaga cgatcctcg 240
aatactgatg agtggtteec tttgacaccg geaggageet tgggeeegtg aetttteete 300
teaggeettg ttetetgett caeacteaat gtgtgtgggg gtetgagtee ageacttetg 360
agteceteag cetecactea ggteaggace agaagteget gtteeettet eagggaatag 420
aagattatee caggtgeetg tgteeagget ggtgtetggg ttetgtgete tetteeeeat 480
cccgggtgtc ctgtccattc tcaagatggc cacatgcgtg ctggtggagt gtcccatgac 540
agatgcaaaa tgcctgaatt ttctgactct tcccgtcag
<210> 404
<211> 574
<212> DNA
<213> Homo sapiens
<400> 404
gtaccaqggg cagtqqqqaq cettceccat ctectataqq teqeeqqqqa tqqeetceca 60
cgagaaqaqq aqqaaaatqq qatcaqcqct aqaatqtcqc cctcccttqa atqqaqaatq 120
geatgagttt teetgagttt cetetgaggg ecceetette tetetaggae aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca gqqqtcccct 240
ttgaccectg cagcageett gggaacegtg acttteetet caggeettgt tetetgeete 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
ategggagea gaagteeetg tteecegete agagaetega aettteeaat gaataggaga 420
ttatcccagg tgcctgcgtc caggctggtg tctgggttct gtgccccttc cccaccccag 480
gtgtcctgtc cattctcagg ctggtcacat gggtggtcct agggtgtccc atgagagatg 540
caaagegeet gaattttetg actetteeca teag
<210> 405
<211> 600
<212> DNA
<213> Homo sapiens
<400> 405
gtaccagggg ccacagggcg cctccctgat cgcctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcac cetecetetg gteetgaggg 120
agaggaatce teetgggttt eeagateetg taccagagag tgaetetgag gtteegeeet 180
getetgtgae acaattaagg gataaaatet etgaaggaat gaegggaaga egateeeteg 240
aatactgatg agtggttccc tttgacacac accggcagca gccttgggcc cgtgactttt 300
cctctcaggc cttgttctct gcttcacact caatgtgtgt gggggtctga gtccagcact 360
tetgagtece teagecteea eteaggteag gaceagaagt egetgtteee tetteaggga 420
ctagaatttt ccacggaata ggagattatc ccaggtgcct gtgtccaggc tggtgtctgg 480
gttctgtgct cccttcccca tcccaggtgt cctgtccatt ctcaagatag ccacatgtgt 540
getggaggag tgteccatta eagatgeeaa atgeetgaat gttetgaete tteetgaeag 600
<210> 406
<211> 600
<212> DNA
<213> Homo sapiens
<400> 406
gtaccagggg ccacagggcg cctccctgat cgcctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcac cetecetetg gteetgaggg 120
agaggaatee teetgggttt ceagateetg taccagagag tgactetgag gtteegeeet 180
gctctgtgac acaattaagg gataaaatct ctgaaggaat gacgggaaga cgatcctcg 240
aatactgatg agtggttccc tttgacacac accggcagca gccttgggcc cgtgactttt 300
ceteteagge ettgttetet getteaeact eaatgtgtgt gggggtetga gteeageact 360
tetgagtece teagecteea eteaggteag gaceagaagt egetgtteee tetteaggga 420
```

```
ctagaatttt ccacggaata ggagattatc ccaggtgcct gtgtccaggc tggtgtctgg 480
gttetgtget ccettececa teccaggtgt cetgtecatt etcaagatag ccacatgtgt 540
gctggaggag tgtcccatta cagatgccaa atgcctgaat gttctgactc ttcctgacag 600
<210> 407
<211> 600
<212> DNA
<213> Homo sapiens
<400> 407
gtaccagggg ccacggggg cctccctgat cgcctgtaga tctcccqggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cctccctctg gtcctgaggg 120
agaggaatce teetgggttt ceagateetg taccagagag tgactetgag gtteegeect 180
gctetetgae acaattaagg qataaaatet etgaaggaat gaegggaaga egateeeteg 240
aatactgatg agtggttccc tttgacacac accggcagca gccttgggcc cgtgactttt 300
cctctcaggc cttqttctct gcttcacact caatgtgtgt gggggtctga gtccagcact 360
totgagtooc toagootooa otoaggtoag gaccagaagt ogotgttooc tottoaggga 420
ctagaatttt ccacqqaata qqaqattatc ccaqqtqcct qtqtccaqqc tqgtqtctqq 480
gttetgtget ceetteecea teccaggtgt cetgteeatt etcaagatag ceacatgtgt 540
gctggaggag tgtcccatga cagatgcaaa atgcctgaat gttctgactc ttcctgacag 600
<210> 408
<211> 575
<212> DNA
<213> Homo sapiens
<400> 408
gtaccagggg cagtggggag cettececat etectatagg tegeogggga tggeeteeca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctcttc tctctaggac aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga atactgatea ggggteetet 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcagaccttg ttctctgcct 300
cacacteagt gtgtttgggg ctctgattce agcacttctg agtcacttta cctccactca 360
gatcaggage agaagteeet gtteeeeget cagagaeteg aacttteeaa tgaataggag 420
attateceag gtgeetgegt ceaggetggt gtetgggtte tgtgeecett ceeeacecea 480
ggtgteetgt ceatteteag tetggteaca tgggtggtee tagggtgtee eatgagagat 540
gccaagegee tgaaatttet gactetteee ateag
<210> 409
<211> 575
<212> DNA
<213> Homo sapiens
<400> 409
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeeteeca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt teetgagttt cetetgaggg ecceetette tetetaggae aattaaggga 180
tgacqtctct gaggaaatgg aggggaagac agtccctagg atagtgatca ggggtccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gttccccgct cagagactcg aactttccaa tgaataggag 420
attateceag gtgcctgcgt ccaggetggt gtctgggttc tgtgcccctt ccccacccca 480
ggtgteetgt ceatteteag getggteaca tgggtggtee tagggtgtee catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
                                                                  575
```

```
<212> DNA
<213> Homo sapiens
<400> 410
qtaccaqqqq caqtqqqqaq cettececat etectataqq teqeeqqqqa tqqeetecea 60
eqaqaaqaqq aqqaaaatgg gateaqeqet aqaatqteqe cetecettga atggaqaatg 120
quatquettt tectquettt cetetqueqq ecceetette tetetuqque aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt gggaaccgtg actttcctct caggccttgt tctctgcctc 300
acacteagtg tgtttggggc tetgatteca geaettetga gteaetttae etecaeteag 360
ategggagea gaagteeetg tteecegete agagaetega aettteeaat gaataggaga 420
ttateceagg tgeetgegte eaggetggtg tetgggttet gtgeecette eecaeceeag 480
gtgtcctgtc cattctcagg ctggtcacat gggtggtcct agggtgtccc atgagagatg 540
caaagegeet gaattttetg actetteeca teag
<210> 411
<211> 575
<212> DNA
<213> Homo sapiens
<400> 411
gtaccagggg cagtggggag cettececat etectatagg teggegggga tggeetecea 60
cgagaagagg aggaaaatgg gatcageget agaatgtege cetecettga atggagaatg 120
gcatgagttt teetgagttt eetetgaggg eeceetette tetetaggae aattaaggga 180
tgacgtetet gaggaaatgg aggggaagte agteectaga atactgatea ggggteecet 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagteeet gtteeeeget cagagacteg aacttteeaa tgaataggag 420
attateceag gtgeetgegt ceaggetggt gtetgggtte tgtgeecett ceceaecea 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgtattttct gactcttccc atcag
<210> 412
<211> 575
<212> DNA
<213> Homo sapiens
<400> 412
gtaccagggg cagtggggag cettececat etectatagg teggegggga tggeetecca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgt aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgaccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gttccccgct cagagactcg aactttccaa tgaataggag 420
attateceag gtgcetgegt ceaggetggt gtetgggtte tgtgeecett eeccaeecea 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
<210> 413
<211> 572
<212> DNA
<213> Homo sapiens
<400> 413
gtaccagggg cagtggggag cetececcat etectatagg tegeogggga tggeeteeca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctcttc tctctagaca attaagggat 180
```

```
gacgtctctq aggaaatgga ggggaagaca gtccctagaa tactgatcag gggtcccctt 240
tgacccctgc ageageettg ggaaccgtga etttteetet caggeettgt tetetgeete 300
acacteagtg tgtttgggge tetgatteca geaettetga gteaetttae etceaeteag 360
atcaggagca gaagtccctg ttccccgctc agagactcga actttccaat gaataggaga 420
ttateceagg tgeetgeate egetggtgte tgggttetgt geecetteee eaceeeaggt 480
gteetgteea tteteagget ggteacatgg gtggteetaq ggtgtgeeat gagagatgea 540
aagcgcctga attttctgac tcttcccatc ag
<210> 414
<211> 572
<212> DNA
<213> Homo sapiens
<400> 414
gtaccagggg cagtggggag cettceccat etectatagg tegeegggga tggeeteeca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt teetgagttt eetetgaggg eeceetette tetetagaea attaagggat 180
gacgtetetg aggaaatgga ggggaagaca gteeetagaa taetgateag gggteeeett 240
tgacccctgc agcageettg ggaaccgtga etttteetet caggeettgt tetetgeete 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtccctg ttccccgctc agagactcga actttccaat gaataggaga 420
ttateccagg tgeetgeate egetggtgte tgggttetgt geeeetteee eaceceaggt 480
gtcctgtcca ttctcaggct ggtcacatgg gtggtcctag ggtgtgccat gagagatgca 540
aagcgcctga attttctgac tcttcccatc ag
<210> 415
<211> 575
<212> DNA
<213> Homo sapiens
<400> 415
gtaccagggg cagtgggga cetececcat etectatagg tegeegggga tggeetecca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
geatgagttt teetgagttt eetetgaggg eeeeetette tetetaggae aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga atactgatea ggggteeeet 240
ttgacecetg cagcageett gggaacegtg actttteete teaggeettg ttetetgeet 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagteest gtteeeeget cagagacteg aacttteeaa tgaataggag 420
attateceag gtgcctgcgt ccaggetggt gtctgggttc tgtgcccctt ccccacacca 480
ggtgteetgt ceatteteag getggteaca tgggtggtee tagggtgtee catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
<210> 416
<211> 575
<212> DNA
<213> Homo sapiens
<400> 416
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeetecea 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
geatgagttt teetgagttt cetetgaggg eeecetette tetetaggae aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga ataetgatea ggggteeeet 240
ttgacceetg cageageett gggaacegtg actttteete teaggeettg ttetetgeet 300
cacacteagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gateaggage agaagteeet gtteeeeget eagagaeteg aacttteeaa tgaataggag 420
attateceag gtgeetgegt eeaggetggt gtetgggtte tgtgeecett eeceaeaea 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
qcaaaqcqcc tqaattttct qactcttccc atcaq
                                                                  575
```

<213> Homo sapiens

```
<210> 417
<211> 575
<212> DNA
<213> Homo sapiens
<400> 417
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeetecea 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacacteagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagtceet gtteeceget eagagacteg aaettteeaa tgaataggag 420
attateceag gtgcetgegt ceaggetggt gtetgggtte tgtgeeeett eeceacacca 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
<210> 418
<211> 575
<212> DNA
<213> Homo sapiens
<400> 418
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeeteeca 60
cgagaagagg aggaaaatgg gatcagegct agaatgtege ceteeettga atggagaatg 120
gcatgagttt teetgagttt eetetgaggg eeeeetette tetetaggae aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacacteagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagteet gtteeeeget eagagaeteg aacttteeaa tgaataggag 420
attateceag gtgcetgegt eeaggetggt gtetgggtte tgtgeecett eeeeaeaea 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagegee tgaattttet gactetteee ateag
<210> 419
<211> 572
<212> DNA
<213> Homo sapiens
<400> 419
gtaccagggg cagtggggag cctcccccat ctcctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctcttc tctctaggac aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga atactgatea ggggteeeet 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gateaggage agaagtetet gtteeceget cagagacteg aacttteeaa tgaatagatt 420
atcocaggtg cotgogtoca ggotggtgtc tgggttctgt gccccttccc caccccaggt 480
gtcctgtcca ttctcaggct ggtcacatgg gtggtcctag ggtgtcccat gagagatgca 540
aagcgcctga attttctgac tcttcccatc ag
                                                                  572
<210> 420
<211> 571
<212> DNA
```

```
<400> 420
gtaccagggg cagtggggag ccttccccat ctcctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt teetgagttt eetetgaggg eeceetette tetetaggae aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt gggaaccatg acttttcctc tcaggccttg tctctgcctc 300
acacteagtg tgtttggggc tetgatteea geaettetga gteaetttae etceaeteag 360
atcaggagca gaagtetetg tteecegete agagaetega aettteeaat gaatagatta 420
teccaggtge etgegteeag getggtgtet gggttetgtg eccetteece acceeaggtg 480
tectgteeat teteaggetg gteacatggg tggteetagg gtgteecatg agagatgeaa 540
agegeetgaa ttttetgaet etteecatea g
<210> 421
<211> 571
<212> DNA
<213> Homo sapiens
<400> 421
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeetecea 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctcttc tctctaggac aattaaggga 180
tgacgtetct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgaccectg cagcageett gggaaccatg actttteete teaggeettg tetetgeete 300
acactcagtg tgtttggggc tctgattcca gcacttctga gtcactttac ctccactcag 360
atcaggagca gaagtetetg tteecegete agagactega aettteeaat gaatagatta 420
teccaggtge etgegtecag getggtgtet gggttetgtg eccetteece acceeaggtg 480
tectgtecat teteaggetg gteacatggg tggteetagg gtgteceatg agagatgeaa 540
agegeetgaa ttttetgaet etteecatea g
<210> 422
<211> 572
<212> DNA
<213> Homo sapiens
<400> 422
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeetecea 60
cgagaagaag aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
geatgagttt teetgagttt eetetgaggg eeeeetette tetetaggae aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga atactgatea ggggteeeet 240
ttgacccctg cagcagcctt gggaaccatg acttttcttc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagtetet gtteeeeget eagagaeteg aacttteeaa tgaatagatt 420
atcccaggtg cctgcgtcca ggctggtgtc tgggttctgt gtcccttccc caccccaggt 480
gtcctgtcca ttctcaggct ggtcacatgg gtggtcctag ggtgtcccat gagagatgca 540
aagcgcctga attttctgac tcttcccatc ag
                                                                   572
<210> 423
<211> 572
<212> DNA
<213> Homo sapiens
<400> 423
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeetecaa 60
cgagaagaag aggaaaatgg gatcageget agaatgtege eeteeettga atggagaatg 120
gcatgagttt teetgagttt eetetgaggg eeceetette tetetaggae aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga atactgatea ggggteeeet 240
ttgacccctg cagcageett gggaaccatg actttteete teaggeettg ttetetgeet 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
```

```
gatcaggage agaagtetet gtteeeeget eagagaeteg aacttteeaa tgaatagatt 420
atcccaggtg cetgegteea ggetggtgte tgggttetgt geceetteee caccccaggt 480
gtectgteca tteteagget ggteaeatgg gtggteetag ggtgteeeat gagagatgea 540
aagcgcctga attttctgac tcttcccatc ag
<210> 424
<211> 575
<212> DNA
<213> Homo sapiens
<400> 424
gtaccagggg cagtggggag cctccccat ctcctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
geatgagttt teetgagttt eetetgaggg eeeectette tetetaggae aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga atactgatea ggggteeeet 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggagc agaagtccct gttccccgct cagagactcg aactttccaa tgaataggag 420
attateceag gtgcctgcgt ecaggetggt gtctgggtte tgtgcccctt ecccaeecea 480
ggtgtcctgc ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
<210> 425
<211> 575
<212> DNA
<213> Homo sapiens
<400> 425
gtaccagggg cagtggggag cetgeeceat etectatagg tegeegggga tggeeteeca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt teetgagttt eetetgaggg eeeeetette tetetaggae aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agcccctaga atactgatca ggggtcccct 240
ttgacccetg cagcageett gggaaccgtg actttteete teaggeettg ttetetgeet 300
cacactcagt gtgtttgggg ctctgattcc agtacttctg agtcacttta cctccactca 360
gateaggage agaagteest gtteeeeget cagagasteg aacttteeaa tgaataggag 420
attateceag gtgeetgegt eeaggetggt gtetgggtte tgtgeeeett eeceaeecea 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgaaagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
<210> 426
<211> 575
<212> DNA
<213> Homo sapiens
<400> 426
gtaccagggg cagtggggag cetgeeceat etectatagg teggegggga tgggeteeca 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt teetgagttt eetetgaggg eeceetette tetetaggae aattaaggaa 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga ataetgatea ggggteeeet 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagteeet gtteeeeget eagagaeteg aaettteeaa tgaataggag 420
attateceag gtgeetgegt eeaggetggt gtetgggtte tgtgeeeett eeceaeeeca 480
ggtgteetgt ceatteteag getggteaca tgggtggtee tagggtgtee catgaaagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
```

```
<211> 574
<212> DNA
<213> Homo sapiens
<400> 427
gtaccagggg cagtggggag cctcccccat ctcctatagg tcgccgggga tggcctccca 60
cgagaagagg aggaaaatgg gatcageget agaatgtege eeteeettga atggagaatg 120
geatgagttt teetgagttt eetetgaggg eeeeetette tetetagaea attaaggaat 180
gaegtetetg aggaaatgga ggggaagaea gteectagaa tactgateag gggteeeett 240
tgacccctgc agcagccttg ggaaccgtga cttttcctct caggccttgt tctctgcctc 300
acactcagtg tgtttggggc tetgatteca geacttetga gteactttae etecaeteag 360
atcaggagca gaagtccctg ttccccgctc agagactcga actttccaat gaataggaga 420
ttatcccagg tgcctgcgtc caggctggtg tctgggttct gtgccccttc cccaccccag 480
gtgtcctgtc cattctcagg ctggtcacat gggtggtcct agggtgtccc atgaaagatg 540
caaagcgcct gaattttctg actcttccca tcag
<210> 428
<211> 575
<212> DNA
<213> Homo sapiens
<400> 428
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeetecea 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctcttc tctctaggac aattaaggga 180
tgacgtctct gaggaaatgg aggggaagac agtccctaga atactgatca ggggtcccct 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagteect gtteeeeget cagagacteg aacttteeaa tgaataggag 420
attateccag gtgcctgcgt ccaggetggt gtctgggttc tgtgcccctt ccccacccca 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
<210> 429
<211> 575
<212> DNA
<213> Homo sapiens
<400> 429
gtaccagggg cagtggggag cettececat etectatagg tegeegggga tggeetecea 60
cgagaagagg aggaaaatgg gatcagcgct agaatgtcgc cctcccttga atggagaatg 120
geatgagttt teetgagttt eetetgaggg eeeeetette tetetaggae aattaaggga 180
tgacgtetet gaggaaatgg aggggaagae agteeetaga ataetgatea ggggteeeet 240
ttgacccctg cagcagcctt gggaaccgtg acttttcctc tcaggccttg ttctctgcct 300
cacactcagt gtgtttgggg ctctgattcc agcacttctg agtcacttta cctccactca 360
gatcaggage agaagteest gtteeceget cagagacteg aacttteeaa tgaataggag 420
attateceag gtgeetgegt ceaggetggt gtetgggtte tgtgeecett ceceaecea 480
ggtgtcctgt ccattctcag gctggtcaca tgggtggtcc tagggtgtcc catgagagat 540
gcaaagcgcc tgaattttct gactcttccc atcag
                                                                  575
<210> 430
<211> 587
<212> DNA
<213> Homo sapiens
<400> 430
qtaccaqggg cagtggggaq ccttccccat ctcctqtaga tctcccqqqa tqqcctccca 60
cqaqqaqgqq aggaaaatgg qatcaqcqct agaatatcqc cctcccttqa atgqaqaatq 120
```

```
ggatgagttt tcctgagttt cctctgaggg ccccctctgc tctctaggac aattaaggga 180
tgaagteett gaggaaatgg aggggaagae agteeetaga ataetgatea ggggteeeet 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacgctcaa tgtgtttaaa ggtttgattc cagcttttct gagtccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttcctccc tcagagacta gaactttcca 420
atgaatagga gattateeca ggtgeetgtg tecaggetgg egtetgggtt etgtgeecee 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag
<210> 431
<211> 587
<212> DNA
<213> Homo sapiens
<400> 431
gtaccagggg cagtggggag cettecccat etcetgtaga teteceggga tggeetecca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt teetgagttt eetetgaggg eeceetetge tetetaggae aattaaggga 180
tgaagteett gaggaaatgg aggggaagae agteeetgga ataetgatea ggggteecet 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcacgctcaa tgtgtttaaa ggtttgattc cagcttttct gagtccttcg 360
gcctccactc aggtcaggac cagaagtcgc tgttcctccc tcagagacta gaactttcca 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgccccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag
<210> 432
<211> 587
<212> DNA
<213> Homo sapiens
<400> 432
gtaccagggg cagtggggag cettececat etecegtaga teteceggga tggeetecea 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt teetgagttt eetetgaggg eeeeetetge tetetaggae aattaaggga 180
tgaagtcctt gaggaaatgg aggggaagac agtccctgga atactgatca ggggtccct 240
ttgaccactt tgaccactgc agcagetgtg gtcaggetge tgacctttet etcaggeett 300
gttctctgcc tcacgctcaa tgtgtttgaa ggtttgattc cagcttttct gagtccttcg 360
geetecacte aggteaggae eagaagtege tgtteetece teagagaeta gaaettteea 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgccccc 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag
<210> 433
<211> 587
<212> DNA
<213> Homo sapiens
<400> 433
gtaccagggg cagtggggag cettececat etecegtaga teteceggga tggeetecea 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt teetgagttt eetetgaggg eeeeetetge tetetaggae aattaaggga 180
tgaagteett gaggaaatgg aggggaagae agteeetaga ataetgatea ggggteeect 240
ttgaccactt tgaccactgc agcagetgtg gtcaggetgc tgacctttct ctcaggectt 300
gttetetgee teaegeteaa tgtgtttgaa ggtttgatte eagettttet gagteetteg 360
gestecasts aggicaggas sagaagisgs igitestess teagagasta gaastitesa 420
atgaatagga gattateeea ggtgeetgtg teeaggetgg egtetgggtt etgtgeeece 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540
```

Cgcaagagag atacaaagtg tetgaatttt etgaetette eegteag 587 <210> 434 <211> 587 <212> DNA <213> Homo sapiens <400> 434 gtaccagggg cagtggggag cettececat etectgtaga teteceggga tggeeteeca 60 cgaggagggg aggaaaatgg gatcagcgct agaatatege cetecettga atggagaatg 120 ggatgagttt teetgagttt eetetgaggg eeceetetge tetetaggae aattaaggga 180 tgaagteett gaggaaatgg aggggaagae agteeetaga atactgatea ggggteeeet 240 ttgaccaett tgaccaetge ageagetgtg gteaggetge tgacetttet eteaggeett 300 gttetetgee teaegeteaa tgtgtttgaa ggtttgatte eagettttet gagteetteg 360 geeteeacte aggteaggae cagaagtege tgtteeteee teagagaeta gaacttteea 420 atgaatagga gattateeea ggtgeetgtg teeaggetgg egtetgggtt etgtgeeeee 480 ttccccaccc caggtgtcct gtccgttctc aggatggtca catgggcgct gttggagtgt 540 cgcaagagag atacaaagtg tetgaatttt etgactette eegteag <210> 435 <211> 588 <212> DNA <213> Homo sapiens <400> 435 gtaccagggg cagtggggag cettececat etectgtaga teteceggga tggeetecea 60 cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120 ggatgagttt teetgagttt eetetgaggg eeeeetetge tetetaggae aattaaggga 180 tgaagteett gaggaaatgg aggggaagae agteeetgga ataetgatea ggggteeeet 240 ttgaccactt tgaccactgc agcagetgtg gtcaggetge tgacctttet etcaggeett 300 gttctctgcc tcacgttcaa tgtgtttgaa ggtttgattc cagcttttct gagtccttcg 360 gectecacte aggicaggae cagaagicge tgitectece teagagaeta gaactiteca 420 atgaatagga gattateeea ggtgeetgtg teeaggetgg egtetgggtt etgtgeeeee 480 ttccccaccc caggigtcct giccattete aggatagica catgggeget gitggagigt 540 cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtgcag 588 <210> 436 <211> 587 <212> DNA <213> Homo sapiens <400> 436 gtaccagggg cagtggggag cettececat etecegtaga teteceggea tggeeteeca 60 cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120 ggatgagttt teetgagttt eetetgaggg eeceetetge tetetaggae aattaaqqqa 180 tgaagteett gaggaaatgg aggggaagae agteeetgga atactgatea ggggteeeet 240 ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300 gttetetgee teaegeteaa tgtgtttgaa ggtttgatte eagettttet qagteetteg 360 gestecasts aggreaggas cagaagtegs tgtteetees teagagasta gaastttesa 420 atgaatagga gattateeea ggtgeetgtg teeaggetgg egtetgggtt etgtgeeeee 480 ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540 cgcaagagag aaacaaagtg tctgaatttt ctgactcttc ccgtcag 587 <210> 437 <211> 587 <212> DNA <213> Homo sapiens

```
<400> 437
gtaccagggg cagtggggag cettceccat etectgtaga teteceggga tggeeteeca 60
cgaggagggg aggaaaatgg gatcagcgct ggaatatcgc cctcccttga atggagaatg 120
ggatgagttt teetgagttt eetetgaggg eeeeetetge tetetaggae aattaaggga 180
tgaagteett gaggaaatgg aggggaagae agteeetgga atactgatea ggggteeeet 240
ttgaccaett tgaccaetge ageagetgtg gteaggetge tgacetttet eteaggeett 300
gttetetgee teaegeteaa tgtgtttaaa ggtttgatte eagettttet gagteetteg 360
geeteeacte aggteaggae cagaagtege tgtteeteee teagagaeta gaacttteea 420
atgaatagga gattateeca ggtgeetgtg tecaggetgg egtetgggtt etgtgeecee 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcact gttggagtgt 540
cgcaagagag atacaaagtg totgaatttt otgactotto cogtoag
<210> 438
<211> 587
<212> DNA
<213> Homo sapiens
<400> 438
gtaccagggg cagtggggag cettececat etectgtaga teteceggga tggeetecea 60
cgaggagggg aggaaaatgg gatcagcgct ggaatatcgc cctcccttga atggagaatg 120
ggatgagttt teetgagttt ettetgaagg eeceetetge tetetaggae aattaaggga 180
tgaagteett gaggaaatgg aggggaagae agteeetgga ataetgatea ggggteeeet 240
ttgaccactt tgaccactgc agcagetgtg gtcaggetgc tgacctttct ctcaggcctt 300
gttctetgcc tcacgctcaa tgtgtttaaa ggtttgattc cagcttttct gagtcettcg 360
gesteeaste aggteaggas cagaagtege tgtteetees teagagasta gaastttesa 420
atgaatagga gattateeea ggtgeetgtg teeaggetgg egtetgggtt etgtgeeece 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcact gttggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactettc ccgtcag
<210> 439
<211> 587
<212> DNA
<213> Homo sapiens
<400> 439
gtaccagggg cagtggggag cettececat etectgtaga teteceggga tggeeteeca 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt teetgagttt cetetgaggg eeceetetge tetetaggae aattaaggga 180
tgaagteett gaggaaatgg aggggaagae agteeetgga ataetgatea ggggteeeet 240
ttgaccactt tgaccactgc agcagetgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttctctgcc tcatgctcaa tgtgtttgaa ggtttgattc cagcttttct gagttcttca 360
geotecacte aggteaggae eagaagtege tgtteeteec teagagaeta gaacttteea 420
atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgccccc 480
ttccccaccc caggigitect giccattete aggatggica catggeeget gitiggagigt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag
<210> 440
<211> 587
<212> DNA
<213> Homo sapiens
<400> 440
gtaccagggg cagtggggag cettececat etectataga teteceggga tggeetecea 60
cgaggagggg aggaaaatgg gatcagcgct agaatatcgc cctcccttga atggagaatg 120
ggatgagttt tecegagttt eetetgaggg eeeegtetge tetetaggae aattaaggga 180
tgaagteeet gaggaaatgg aggggaagae agteeetgga ataetgatea ggggteeeet 240
ttgaccactt tgaccactgc ggcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
```

```
gttctctgcc tcacactcaa tgtgtctgaa ggtttgattc cagcttttct gagtccttcg 360
gestecasts aggreaggas cagaagtege tgtteetees teagagasta gaasttteea 420
aagaatagga gattateeca ggteeetgtg teeaggetgg egtetgggtt etgtgeeece 480
ttccctaccc caggigtcct gtccattctc aggatggtca catgggcgct gctggagtgt 540
cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag
<210> 441
<211> 587
<212> DNA
<213> Homo sapiens
<400> 441
gtaccagggg cagtggggag cettccccat ctectataga teteceggga tggeetecca 60
cgaggagggg aggaaaatgg gatcagcact ggaatatcgc cctcccttga atggagaatg 120
gcatgagttt tcctgagttt cctctgaggg ccccctctgc tctctaggac aattaaggga 180
tgaagtetet gaggaaatgg aggggaagae agteeetgga ataetgatea ggggteteet 240
ttgaccactt tgaccactgc agcagctgtg gtcaggctgc tgacctttct ctcaggcctt 300
gttetetgee teacacteaa tgtgtetgaa ggtttgatte eagettttet gagteetgea 360
geetecacte aggteaggae cagaagtege tgtteeteec teagagaeta gaaettteea 420
atgaatagga gattateeea ggtgeetgtg teeaggetgg egtetgggtt etgtgeegee 480
ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gctggagtgt 540
cccaagagag atgcaaagtg tctgaatttt ctgactcttc ccgtcag
<210> 442
<211> 245
<212> DNA
<213> Homo sapiens
<400> 442
gtgagtgacc ceggeceggg gegeaggtea egacteecea teececaegt aeggeceggg 60
tegeceegag teteegggte egagateege eeeetgagge egegggaeee geeeagaeee 120
tegaceggeg agageeceag gegegtttae eeggttteat ttteagttga ggeeaaaate 180
eccgegggtt ggteggggeg gggegggget eggggggaeg gggetgaeeg eggggeeggg 240
gccag
<210> 443
<211> 246
<212> DNA
<213> Homo sapiens
<400> 443
gtgagtgaec ceggeeeggg gegeaggtea egaeecetee ceateeeeca eggaeggeee 60
gggtcgcccc gagtctcccg gtctgagatc caccccgagg ctgcggaacc cgcccagacc 120
ctcgaccgga gagageeeca gteacettta eceggtttea tttteagttt aggeeaaaat 180
ccccgcgggt tggtcggggc tggggcgggg ctcgggggac ggggctgacc acgggggcgg 240
                                                                   246
ggccag
<210> 444
<211> 598
<212> DNA
<213> Homo sapiens
<400> 444
gtaccagggg ccacggggeg cctccctgat cgcctgtaga tctcccgggc tggcctccca 60
caaggagggg agacaattgg gaccaacact agaatatcgc cetecetetg gteetgaggg 120
agaggaatcc teetgggttt ceagatectg taccagagag tgactetgag gtteegeeet 180
getetetgae acaattaagg gataaaatet etgaaggaat gaegggaaga egateeeteg 240
```

cctctcagge tctgagtccc ctagaatttt gttctgtgct	cttgttctct tcagcctcca ccacggaata cccttcccca	gcttcacact ctcaggtcag ggagattatc tcccaggtgt	caatgtgtgt gaccagaagt ccaggtgcct cctgtccatt	gccttgggcc gggggtctga cgctgttccc gtgtccaggc ctcaagatag tctgactctt	gtccagcact tcttcaggga tggtgtctgg ccacatgtgt	300 360 420 480 540 598
<210> 445 <211> 574 <212> DNA <213> Homo	sapiens					
cgagaagagg gcatgagttt tgacgtctct ttgacccctg acactcagtg atcaggagca ttatcccagg gtgtcctgtc	aggaaaatgg teetgagttt gaggaaatgg cagcageett tgtttgggge gaagteeetg tgeetgegte	gatcagcgct cetctgaggg aggggaagac gggaccgtga tetgatteca tteceegete caggetggtg etggtcacat	agaatgtcgc ccccctcttc agtccctaga cttttcctct gcacttctga agagactcga tctgggttct gggtggtcct	tcgccggga cctcccttga tctctaggac atactgatca caggccttgt gtcactttac actttccaat gtgccccttc agggtgtccc	atggagaatg aattaaggga ggggtccct tctctgcctc ctccactcag gaataggaga .cccaccccag	
<210> 446 <211> 587 <212> DNA <213> Homo	sapiens					
cgaggagggg ggatgagttt tgaagtcctt ttgaccactt gttctctgcc	aggaaaatgg tcctgagttt gaggaaatgg tgaccactgc tcacgctcaa	gatcagcgct cctctgaggg aggggaagac agcagctgtg tgtgtttgaa	agaatatege ccccctctge agtccctgga gtcaggctge ggtttgatte	tctcccggga cctcccttga tctctaggac atactgatca tgacctttct cagctttct	atggagaatg aattaaggga ggggtccct ctcaggcctt gagtccttcg	120 180 240 300

gcctccactc aggtcaggac cagaagtcgc tgttcctccc tcagagacta gaactttcca 420 atgaatagga gattatccca ggtgcctgtg tccaggctgg cgtctgggtt ctgtgccccc 480 ttccccaccc caggtgtcct gtccattctc aggatggtca catgggcgct gttggagtgt 540

587

cgcaagagag atacaaagtg tctgaatttt ctgactcttc ccgtcag